

NOTE: The following report on **MILITARY SEXUAL TRAUMA AMONG THE RESERVE COMPONENTS OF THE ARMED FORCES** was obtained by the Democratic staff of the House Veterans Affairs Committee. As of 9/28/2005 it has not been released officially by the Department of Veterans Affairs. It was due to Congress on 3/31/2001.

**MILITARY SEXUAL TRAUMA AMONG THE  
RESERVE COMPONENTS OF THE ARMED FORCES  
The Veterans Millennium Health Care and Benefits Act  
Public Law (P.L.) 106-177**

**FINAL REPORT**

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## Table of Contents

	Page
<b>Executive Summary</b> .....	5
<b>I. Introduction</b>	
A. General Background of the Study.....	7
B. Rationale and Research Questions.....	8
<b>II. Study Methodology</b>	
A. Definitions of Terminology Used in this Report.....	8
B. Study Group Selection .....	9
C. Sampling Plan .....	10
1. Determination of Sample Size.....	10
2. Determination of Sampling Plan.....	11
D. Location Efforts.....	12
E. Questionnaire Development.....	13
F. Interviewer Training.....	14
G. Survey Procedures.....	15
1. Preliminary Contact.....	15
2. Conducting the Interview.....	15
3. Procedures to Encourage Participation.....	16
4. Summary of Field Outcomes.....	17
<b>III. Methods of Analysis</b>	
A. Methods Used to Establish Prevalence Rates.....	23
1. Prevalence Analyses.....	23
2. Problems of Ineligibility and Misclassification.....	23
3. Modification of Prevalence Analyses.....	25
4. Statistical Weights.....	25
5. Imputation Method.....	26
6. Sensitivity Analyses.....	26
B. Methods for Estimating Resources Required to Meet Legal Mandate.....	27
1. Number of Reservists Likely to Seek Care.....	27
2. Annual Utilization and Dollar Value.....	27

#### **IV. Results**

A. Demographic and Military Characteristics of Participants.....	30
B. Prevalence Rates of Military Sexual Trauma.....	33
C. Reservists' Experiences of Military Sexual Trauma.....	37
D. Seeking Counseling for Military Sexual Trauma.....	54
E. Estimate of Resources Required to Meet Legal Mandate.....	56
1. Number of Reservists Likely to Seek Care.....	56
2. Estimate of VA Resources Needed to Handle Annual Flow of New Separatees.....	60
3. Estimate of VA Resources Needed to Handle Potential Backlog.....	62
4. Estimate of Resources Needed If Care is Given By Non-VA Providers.....	62
5. Projections Do Not Estimate Costs of Implementation.....	66

#### **V. Discussion**

A. Prevalence Rates of Military Sexual Trauma.....	66
B. Resources Required to Meet Counseling Needs.....	67
C. Strengths and Limitations of the Investigation.....	68

#### **VI. References**

#### **VII. Appendices**

Appendix A, Considerations for Sample Size Determination.....	73
Appendix B, Military Sexual Trauma Among the Reserve Components of the Armed Forces, Survey Instrument.....	79
Appendix C, Determination of Average Costs Underlying Projected Cost Estimates .....	134



## Tables Included in Report

	Page
<b>II. Study Methodology</b>	
A. Distribution of Population of Former Reservists by Component and Gender.....	11
B. Proposed Sampling Plan by Component and Gender.....	11
C. Distribution of Drawn Sample by Component and Gender.....	12
D. Proportion of Total Cases (N=22,500) Not Located.....	13
E. Distribution of Participants by Component and Gender.....	18
F. Distribution of Total Eligible Sample by Component and Gender.....	18
G. Distribution of Non-qualified Sample by Component and Gender.....	19
H. Summary of Final Disposition for the Full Sample.....	22
I. Survey Outcome Rates Based on Disposition Codes.....	23
<b>III. Methods of Analysis</b>	
J. Male Reservists: Estimated Statistical Weights by DMDC and Self-Reported Component ...	25
K. Female Reservists: Estimated Statistical Weights by DMDC and Self-Reported Component .....	26
<b>IV. Results</b>	
L. Selected Demographic Characteristics of Study Participants.....	30
M. Mean Age for Target Sample, Eligible Sample, and Study Participants by Component and Gender.....	31
N. Selected Military Characteristics of Study Participants.....	32
O. Estimated Prevalence Rates of Military Sexual Trauma by Self-Report of Primary Component.....	33
P. Estimated Prevalence Rates of Selected Outcomes Related to Military Sexual Trauma .....	34
Q. Estimated Population Frequencies of Military Sexual Trauma Based on Self-Reported Classification of Component by Gender.....	35
R. Estimated Population Frequencies of Military Sexual Assault Based on Self-Reported Classification of Component by Gender.....	36
S. Estimated Numbers of Reservists with Military Sexual Trauma Seeking Help for the Experience.....	55
T. Estimated Number of Former Reservists Likely to Seek Military Sexual Trauma-Related Care.....	58
U. Estimated Mental Health Care Costs of VA Treatment of Annual Flow of Reservists Who Have Experienced Military Sexual Trauma.....	60
V. Estimated Total Health Care Costs of VA Treatment of Annual Flow of Reservists Who Have Experienced Military Sexual Trauma.....	61
W. Estimated Health Care Costs of VA Treatment of Backlog of Reservists Who Have Experienced Military Sexual Trauma .....	62
X. Estimated Annual Average Non-VA Costs Per Patient Receiving VA Military Sexual Trauma Treatment in FY2000.....	64
Y. Comparison of Projected Costs Using VA Providers With Two Measures of Costs of Non-VA Providers .....	64
Z. Estimated Costs of Treatment by Non-VA Providers of Former Reservists Who Experienced Military Sexual Trauma.....	65
AA. Estimated Annual Cost Combining VA and Non-VA Providers.....	66

## Figures Included in Report

	Page
<b>IV. Results</b>	
A. Male Reservists: Type of Situation Reported as Having Greatest Effect.....	38
B. Female Reservists: Type of Situation Reported as Having Greatest Effect.....	38
C. Male Reservists: Single Incident vs. Ongoing Series of Incidents.....	40
D. Female Reservists: Single Incident vs. Ongoing Series of Incidents.....	40
E. Male Reservists: Proportion That Occurred at Military Worksite.....	42
F. Female Reservists: Proportion That Occurred at Military Worksite.....	42
G. Male Reservists: Proportion That Occurred During Duty Hours.....	43
H. Female Reservists: Proportion That Occurred During Duty Hours.....	43
I. Male Reservists: Gender of the Offenders.....	45
J. Female Reservists: Gender of the Offenders.....	45
K. Male Reservists: Known vs. Unknown Offenders.....	46
L. Female Reservists: Known vs. Unknown Offenders.....	46
M. Male Reservists: Military vs. Civilian Offenders.....	47
N. Female Reservists: Military vs. Civilian Offenders.....	47
O. Male Reservists: Reported the Situation Through Official Channels.....	49
P. Female Reservists: Reported the Situation Through Official Channels.....	49
Q. Male Reservists: Action Taken to Correct Situation.....	50
R. Female Reservists: Action Taken to Correct Situation.....	50
S. Male Reservists: Encouraged to Drop the Complaint.....	51
T. Female Reservists: Encouraged to Drop the Complaint.....	51
U. Male Reservists: Satisfaction with Complaint Process.....	53
V. Female Reservists: Satisfaction with Complaint Process.....	53

## **Executive Summary**

### **Rationale and Research Questions:**

- In accordance with the Veterans Millennium Health Care and Benefits Act, the primary objective of this investigation was to collect data from a sample of former members of the Reserve Components of the Armed Forces.
- The specific aims of the study were to:
  - ✓ Examine the extent of Reservists' experiences of sexual harassment and sexual assault during their military service and specifically while on Active Duty for Training (ADT) status,
  - ✓ Examine the extent to which these former members of the Reserves have sought counseling through Veterans Affairs (VA) relating to these experiences of sexual trauma,
  - ✓ Determine the additional resources that would be required to meet the projected need of those former members of the Reserves for counseling related to experiences of military sexual trauma.

### **Research Plan:**

- To achieve these goals, a stratified random sample of former members of all seven components of the Reserve Components of the Armed Forces identified by the Defense Manpower Data Center (N=3,946) were surveyed by phone using a computer-assisted telephone interviewing program.
- Schulman, Ronca and Bucuvalas, Inc., a national opinion research firm with experience in conducting survey assessments on similar topics, was contracted to conduct the location searches and telephone interviews.
- Participants were asked about experiences of military sexual trauma (i.e., sexual harassment and sexual assault during their military service), psychological and physical health symptoms, and their utilization of health services.

### **Primary Findings Regarding the Prevalence of Military Sexual Trauma:**

- Across all seven Reserve Components, the estimated prevalence of any military sexual trauma among males is 27.2%; among females the estimated prevalence is 60.0%. The estimated prevalence of military sexual assault (i.e., unwanted physical contact of a sexual nature) among males is 3.5%; among females the estimated prevalence is 23.3%.
- The prevalence of military sexual trauma experienced by Reservists specifically while on Active Duty for Training status was somewhat lower than the more general rates, with an estimated prevalence of 16.4% among male Reservists and 49.2% among female Reservists.
- When prevalence rates of military sexual trauma are stratified by specific component, among males the estimated prevalence ranges from 21.3% for Air National Guard to 28.7% for both Army National Guard and Marine Corps Reserve; among females, the estimated population prevalence ranges from 57.1% for Navy Reserve to 75.0% for Marine Corps Reserve.
- Over half of these experiences occurred at a military worksite and during duty hours. The majority of these experiences involved military personnel as offenders.

#### Primary Findings Regarding Seeking and Receiving Treatment for Military Sexual Trauma:

- Of those Reservists who experienced military sexual trauma, 1.1% of men and 1.5% of women reported having sought care from VA specifically for that trauma.
- Of those Reservists who experienced military sexual trauma, less than 19% reported receiving any help for the trauma at any time. Across all sources of care, women were more likely to seek health care services than were men. Both men and women who reported sexual assault were more likely to seek care than were those who reported experiencing any form of military sexual trauma. Both men and women were more likely to seek care as time passed, with the largest proportions getting care at the time of the survey.
- Currently, the estimated number of former Reservists who are likely to seek care in the future is approximately 33,300 (18,600 males, 14,700 females), about 75% of whom report that they would seek this care from VA if it were offered.
- In the future, for Reservists separating from the military each year, 1,100 males and 750 females, on average, experience military sexual trauma and are likely to eventually seek treatment.

#### Primary Findings Regarding Estimated Resources Required to Meet Counseling Needs:

- The best estimate for resources required to meet the military sexual trauma-related counseling needs of Reservists who have already separated from the military is \$900 million (2003 dollars) over five to 10 years.
- For Reservists separating in each year, the annual estimated treatment cost is \$12 million for mental healthcare, with a total of approximately \$50 million (2003 dollars) over 5 years.
- The timing of these costs will depend on how quickly information about the availability of this benefit can be transmitted to former Reservists, how quickly eligible Reservists take advantage of these services, and how quickly VA can make staffing and facility adjustments to accommodate the new flow of patients.

## I. Introduction

### A. General Background of the Study

Prior research has demonstrated that male and female members of the U.S. active duty military forces report experiencing high rates of sexual harassment, sexual assault, and rape during their military service. The most recent large-scale survey conducted among active duty military populations, the *Department of Defense's Sexual Harassment Survey (1995)*, reported the *annual incidence* of sexual harassment to be 78% among women and 38% among men (43% overall) and the *annual incidence* of attempted or completed rape of 6% for women and 1% for men (2% overall, Bastian, Lancaster, & Reyst, 1996). Veteran users of VA healthcare also report experiencing high rates of sexual trauma during their military service. Among female veteran users of VA healthcare, 55% reported experiencing some form of sexual harassment while in the service and 23% reported having experienced at least one attempted or completed rape during their military service (Skinner, Kressin, Frayne, Tripp, Hankin, Miller, & Sullivan, 2000). Investigations using wartime military samples suggest similarly high rates of military sexual trauma. In one sample of female Gulf War military personnel (which included members of the active duty forces and members of the Reserve Forces who had been called to active duty) 69% of the sample reported experiencing sexual harassment and 7% reported experiencing at least one attempted or completed rape during their time in the Gulf (Wolfe, Sharkansky, Read, Dawson, Martin, & Oimette, 1998). Despite significant evidence from these and other investigations documenting high rates of military sexual trauma among active duty forces, no previous investigations have examined experiences of military sexual trauma among members of the Reserve Components of the Armed Forces who have not been called to active duty.

The high rates of sexual harassment and sexual assault reported by active duty military populations are even more troubling in light of the significant negative health consequences that are often associated with these experiences. Among both men and women in the active duty military, those who have experienced military sexual trauma report poorer psychological well-being, more physical problems and lower satisfaction with health and work when compared to men and women who have not experienced military sexual trauma (Fitzgerald, Drasgow, & Magley, 1999; Magley, Waldo, Drasgow, & Fitzgerald, 1999). Compared to their counterparts with no military sexual harassment, female veterans who use VA healthcare and report a history of military sexual trauma are more likely to report poorer health habits and increased likelihood of a history of depression or anxiety (Murdoch & Nichol, 1995). Female veterans who report a history of military sexual trauma also report more readjustment problems following discharge, including difficulties finding work, a greater incidence of not working due to mental health problems, higher rates of substance abuse disorders, and poorer general psychological and physical health functioning (Skinner et al., 2000).

In response to reports of high rates of military sexual trauma and the associated negative health sequelae, Public Law 102-585 (1992) provided the Veterans Administration with authority to provide counseling to women to overcome sexual trauma that occurred while serving on active duty. Title 38 U.S.C. 1720D (a)(1) states "...the Secretary may provide counseling to a veteran who the Secretary determines requires such counseling to overcome psychological trauma, which in the judgment of a mental health professional employed by the Department, resulted from a physical assault of a sexual nature, battery of a sexual nature, or sexual harassment which occurred while the veteran was serving on active duty." Public Law 103-452 (1994) established the gender neutrality of this authority and expanded the benefit to include "treatment and services that may be needed for injury, illness or other psychological conditions resulting from sexual trauma." Title 38 does not currently extend these benefits to members of the Reserve Components of the Armed Forces who experienced military sexual trauma while on active duty for training status.

## B. Rationale and Research Questions

The Veterans Millennium Health Care and Benefits Act, PL 106-117, H.R. 2116, Section 115 (e) pg. 15, dated November 30, 1999 mandates:

“SEC. 115. Counseling and Treatment For Veterans Who Have Experienced Sexual Trauma.

(e) Study of Expanding Eligibility for Counseling and Treatment.

(1) The Secretary of Veterans Affairs, in consultation with the Secretary of Defense, shall conduct a study to determine-

(A) the extent to which former members of the Reserve Components of the Armed Forces experienced physical assault of a sexual nature or battery of a sexual nature while serving on active duty for training;

(B) the extent to which such former members have sought counseling from the Department of Veterans Affairs relating to those incidents;

(C) and the additional resources that, in the judgment of the Secretary, would be required to meet the projected need of those former members for such counseling.”

Accordingly, the primary objective of the investigation is to collect data from a sample of former members of the Reserve Components of the Armed Forces in order to address the following specific aims:

(A) Identify the prevalence rates of former Reservists’ experiences of sexual trauma, including sexual harassment and sexual assault, during their military service, and specifically while on Active Duty for Training (ADT) status;

(B) Examine the extent to which these former members of the Reserves have sought counseling through Veterans Affairs (VA) relating to these experiences of sexual harassment and sexual assault;

(C) Determine the additional resources that would be required to meet the projected need of those former members of the Reserves for counseling related to experiences of military sexual trauma.

## II. Study Methodology

### A. Definitions of Terminology Used in this Report

Sexual harassment is defined as unwelcome verbal or physical behavior of a sexual nature that occurs in the workplace. Theoretical models of sexual harassment (e.g., Fitzgerald, Swan, & Magley, 1996) have identified three distinct types of behaviors that constitute sexual harassment: *gender harassment* and *unwanted sexual attention*, which parallel the legal construct of hostile environment harassment, and *sexual coercion*, which is consistent with the legal construct of quid pro quo harassment. The term sexual harassment can encompass a rather wide-range of behaviors some of which are relatively common experiences in the workplace (e.g., “told sexual stories or jokes that were offensive to you”) while others are less so (e.g., “had sex with you without your consent or against your will”). Therefore, for the purposes of this report, a participant was

considered “sexually harassed” if he or she endorsed a minimum number of potentially harassing experiences (e.g., four or more separate experiences) or at least one of a specified type of experience presumed to be less normative or more severe (e.g., extortion of sexual cooperation in return for job related considerations). For the purposes of this investigation, sexual assault is defined as unwanted physical contact of a sexual nature (e.g., fondling, stroking, kissing) and includes attempted or completed rape. Rape is defined as unwanted vaginal, anal or oral intercourse or penetration using fingers or other objects, using force or the threat of force. For the purpose of this investigation, a participant in the survey is considered to have experienced military sexual trauma, sometimes abbreviated as MST, if he or she reported experiencing sexual harassment, sexual assault, or rape, as defined above, at some point during his or her service in the Reserves. The term “military sexual trauma” is used in this report consistent with its usage throughout VA meaning any unwanted, uninvited sexual experience during military service. However, it should be noted that such experiences may not be uniformly perceived by victims to be “traumatic” in a psychological sense.

## **B. Study Group Selection**

As mandated by The Veterans Millennium Health Care and Benefits Act, participation in this investigation was limited to former members of the Reserve Components of the Armed Forces who participated primarily in Active Duty for Training activities. Accordingly, former Reservists were deemed ineligible for participation in this investigation if they were ever drafted or had ever enlisted in the active duty forces (other than for training purposes only). In addition, efforts were undertaken to ensure that participants were drawn from the pool of former Reservists not currently eligible for VA services. Title 38 U.S.C. 5303A states that the minimum active duty service requirement for eligibility for VA benefits is the full time for which the individual was called to duty (prior to September 7<sup>th</sup>, 1980) or the shorter of the full time for which they were called or 24 months of continuous active duty (after September 7<sup>th</sup> 1980). In accordance with this regulation, if Reservists had been ordered to active duty service (other than for training purposes only) prior to September 7<sup>th</sup>, 1980 they were eligible for this investigation only if they did not serve for the full time for which they were called. If Reservists had been ordered to active duty service after September 7<sup>th</sup>, 1980, they were eligible for this investigation only if they did not serve for either the full time that they were called or for 24 months of continuous active duty.

The Defense Manpower Data Center (DMDC) agreed to use its automated files of members of the Reserve Components of the Armed Forces to provide the names, dates of birth, social security numbers, last known addresses and telephone numbers of potential participants who were former Reservists and had not served in the active duty forces. In order to identify the study group of interest, data programmers at DMDC began with a listing of all Reserve Master and Transaction records from 1950 - 2000. These cases were then matched against the Active Duty Master and Transaction records to ensure that none of the Reservists had previously served or are currently serving in the active duty forces. The remaining cases were then matched against a special file of contingencies representing Desert Shield/Storm, Bosnia, Kosovo and Haiti to limit potential participants to those who served primarily in Active Duty for Training status. Finally, the remaining cases were matched against social security administration death files in order to limit potential participants to those who are still alive. According to these specifications, the total population of former members of the Reserve Components of the U.S. Armed Forces identified by DMDC was 935,563.

## C. Sampling Plan

### 1. Determination of Sample Size

One of the primary aims of this investigation was to estimate the prevalence of incidents of sexual trauma, including sexual harassment and sexual assault, experienced by members of the Reserve Components of the Armed Forces during their military service. Accordingly, the ability to estimate these prevalence rates accurately was the primary consideration in the determination of sample size. The translation of a width of a confidence interval into a sample size is frequently used to achieve a specific level of precision associated with the estimate of the population parameter. Using a confidence interval to specify the level of precision for an estimate requires the knowledge or the assumption that the estimate has at least an approximately normal distribution, a reasonable assumption in this case. More critically, the confidence interval approach to identifying a sample size requires two somewhat subjective decisions. First, a choice of an acceptable width (or precision) is required. Second, a choice must be made for a value of the variance.

For this investigation, the decision was made to determine the sample size required to achieve an approximate 95 percent confidence interval of width .02 for the estimate of the prevalence of sexual trauma. Given that there are no existing reports of rates of sexual trauma experienced by former Reservists, the value of the variances necessary for computing sample sizes considered for this investigation were calculated based on data from several sources, including the Department of Defense's , *Sexual Harassment in the Military 1988*) and *Sexual Harassment Survey (1995)*, both studies of military sexual trauma among active duty members of the Armed Forces conducted by the DMDC, and data from the *National Health Survey of Gulf War-Era Veterans and Their Families (1994*; as cited in Kang, Mahan, Lee, Magee & Murphy, 2000). For a more detailed description of sample size determination, see Appendix A, Considerations for Sample Size Determination.

Based on these parameters, from a statistical viewpoint, sample sizes of 2,400 females and 1,224 males are adequate to estimate the prevalence of sexual trauma with a precision of  $\pm 2\%$ . In order to ensure an adequate sample of sexually traumatized participants for necessary follow-up analyses, the proposed sample size was increased to 2,500 females and 2,000 males. Thus, a total sample size of 4,500 former members of the Reserve Components of the Armed Forces was proposed.



## 2. Determination of Sampling Plan

The sampling plan for this investigation consisted of a stratified random sampling plan, with strata defined in terms of the seven components of the Reserve forces (i.e., Army Reserve, Army National Guard, Naval Reserve, Marine Corps Reserve, Air Force Reserve, Air National Guard, Coast Guard Reserve). Males and females were considered as two separate populations. Determination of the sampling plan began with a sampling frame based on the records identified by DMDC. The total population of former Reservists identified by DMDC was 935,563. The distribution of the population of former Reservists by component and gender as identified by DMDC is presented in Table A.

Table A: Distribution of Population of Former Reservists by Component and Gender

Component	Male		Female		Total
Army Reserve	385,501	49.45%	92,128	59.06%	477,629
Army National Guard	192,134	24.65%	30,687	19.67%	222,821
Naval Reserve	64,538	8.28%	13,960	8.95%	78,498
Marine Corps Reserve	63,422	8.14%	1,551	0.99%	64,973
Air Force Reserve	55,739	7.15%	12,638	8.10%	68,377
Air National Guard	16,116	2.07%	4,572	2.93%	20,688
Coast Guard Reserve	2,113	0.27%	464	0.30%	2,577
<b>TOTAL</b>	<b>779,563</b>	<b>100.00%</b>	<b>156,000</b>	<b>100.00%</b>	<b>935,563</b>

Given this distribution of the population of former Reservists and the proposed sample size of 2,500 females and 2,000 males, the specific sampling plan for this investigation was proposed. The proposed sampling plan is presented in Table B.

Table B: Proposed Sampling Plan by Component and Gender

Component	Male		Female		Total
Army Reserve	989	49.45%	1476	59.04%	2465
Army National Guard	493	24.65%	492	19.68%	985
Naval Reserve	166	8.30%	224	8.96%	390
Marine Corps Reserve	163	8.15%	25	1.00%	188
Air Force Reserve	143	7.15%	203	8.12%	346
Air National Guard	41	2.05%	73	2.92%	114
Coast Guard Reserve	5	0.25%	7	0.28%	12
<b>TOTAL</b>	<b>2000</b>	<b>100.00%</b>	<b>2500</b>	<b>100.00%</b>	<b>4,500</b>

In order to account for possible location difficulties, participant ineligibility and participant refusal, a total sample of 22,500 cases was drawn from the population of 935,563. The distribution of the drawn sample by component and gender is presented in Table C.

Table C: Distribution of Drawn Sample by Component and Gender

<b>Component</b>	<b>Male</b>		<b>Female</b>		<b>Total</b>
Army Reserve	4,945	49.45%	7,380	59.04%	12,325
Army National Guard	2,465	24.65%	2,460	19.68%	4,925
Naval Reserve	830	8.30%	1,120	8.96%	1,950
Marine Corps Reserve	815	8.15%	125	1.00%	940
Air Force Reserve	715	7.15%	1,015	8.12%	1,730
Air National Guard	205	2.05%	365	2.92%	570
Coast Guard Reserve	25	0.25%	35	0.28%	60
<b>TOTAL</b>	<b>10,000</b>	<b>100.00%</b>	<b>12,500</b>	<b>100.00%</b>	<b>22,500</b>

#### **D. Location Efforts**

The initial task of the investigation was to locate the Reservists in the sample. Given the high likelihood that the contact information received from the DMDC would be outdated, the National Institute of Occupational Safety and Health (NIOSH) was contracted to provide updated address information on potential participants. NIOSH was provided with the social security numbers and the first four letters of the last names of potential participants. If this information matched exactly with an individual in the IRS database, NIOSH provided that individual's address from their most recent tax return. A subset of 1,029 of the 22,500 Reservists did not match with a name and social security number combination in the IRS system. Based on unsuccessful location attempts on 200 of these cases, the cases were assumed to have an incorrect or invalid social security number in the DMDC sample file. Accordingly, the remainder of these 1,029 cases were not subjected to additional location efforts and were never fielded.

Schulman, Ronca and Bucuvalas, Inc. (SRBI), a national survey research firm, was contracted to conduct the additional location efforts and telephone interviews. For those cases where the contact information supplied by NIOSH was inaccurate, SRBI developed a protocol to secure accurate telephone numbers. First, the cases were passed through Telematch, a computerized database of nationwide telephone books, first using last name and address, and then using address only, to generate a working telephone number. If the phone number associated with the Telematch search was not accurate, directory assistance was called in an attempt to locate an accurate number. Those cases still without updated contact information were passed through the Experian Credit Bureau address and phone update service using the Reservist's social security number. The Experian service provided the last known address and telephone number for a given social security number. If the telephone number obtained through Experian was not correct, directory assistance was tried for each of the Experian addresses in an attempt to generate a working telephone number. After exhausting these efforts, accurate contact information could not be obtained for 9,468 of the original 22,500 cases. The breakdown of cases not located is presented in Table D.

Table D: Proportion of Total Cases (N=22,500) Not Located

Disposition	# of Cases	% of Cases
Never Located	3730	16.58%
No IRS match	1029	
No listing	2655	
APO address	23	
Foreign address	23	
Not Located/ Bad Number	5738	25.50%
Business/Government	71	
Cell phone	4	
Fax/Modem	134	
Incomplete/Line problem	43	
Language barrier	22	
Not-in-service	1664	
Wrong number	2258	
Possible unassigned	12	
Non-published number	1530	

## E. Questionnaire Development

The initial months of the investigation were devoted to the development of the survey instrument. The principal investigator, project coordinator, and health economists worked together to design a survey instrument that assessed former Reservists' experiences of sexual harassment and sexual assault during their military service, the Reservists' utilization of counseling services, including questions directly related to the utilization of VA services, and information on the former Reservists' psychological and physical health functioning. Efforts were made to ensure that the survey adequately assessed the constructs of interest, was easily administered and understood, and could be completed in a relatively brief period of time. In addition, particular efforts were made to ensure that the survey instrument was sensitive to the possibility that participants might become distressed when recalling incidents of sexual trauma experienced during their military service.

The primary construct for this investigation, Reservists' experiences of sexual harassment and sexual assault during their military service, was assessed using a modified military version of the Sexual Experiences Questionnaire (SEQ-DoD; Fitzgerald, Magley, Drasgow, & Waldo, 1999). The SEQ-DoD is the measure used as the basis of the Department of Defense's *Sexual Harassment Survey (1995)*, which assessed the prevalence of sexual harassment and sexual assault among active duty members of the Armed Forces. In addition, the SEQ-DoD was augmented with additional items that focus more explicitly on the assessment of sexual assault and rape. These items were based on items drawn from the *Sexual Assault on Active Duty Air Force Women: A Preliminary Study (1994)*, and were originally created for the *National Women's Study (1989)*. Minor modifications were made to the wording of the instruments to ensure that the language was appropriate to the Reserve context and for participants of either gender. In addition to frequency information about experiences of sexual harassment and sexual assault, the survey instrument assessed more qualitative aspects of the unwanted sexual experience including the nature of the victim's relationship with the perpetrator, the extent of physical force utilized during the assault,

and the extent of the victim's reporting of the incident. The decision to base the survey instrument on measures previously administered in active duty samples was made in order to allow for the comparison of rates of sexual trauma reported by members of the Reserve Components during this investigation with rates of sexual trauma reported by active duty personnel in previous investigations.

Following the initial development of the survey instrument, a panel of five consultants with expertise in the areas of military sexual trauma, sexual trauma counseling, military service in the Reserve Components, and VA healthcare reviewed the instrument and provided feedback on its content. As a final step in the review process, six pilot interviews were conducted with members of the target population for which the items were intended (i.e., male and female former members of the Reserve Components). The feedback from the expert consultants and the results of the pilot interviews were used to refine the questions included in the survey instrument to ensure that no important content areas had been overlooked, to ensure that the language of the survey instrument was clear, simple and appropriate for a Reservist population, and to delete any redundant or unnecessary items.

Following these revisions of the survey instrument, the instrument was sent to the contracted survey research firm, SRBI, who reviewed the instrument and suggested minor wording changes and additional probe statements to increase the ability of participants to easily understand the survey questions. Following these final revisions to the instrument, the hard copy questionnaire was programmed into the computer-assisted telephone interviewing (CATI) system. In the CATI system, the interviewer conducts each interview using the questionnaire presented on the computer screen. The advantages of the CATI system include automatic skip-outs, error checks for inconsistent or out-of-range answers and a highly efficient interview process. The final version of the survey instrument can be found in Appendix B.

## **F. Interviewer Training**

SRBI, the national survey research firm contracted to conduct the telephone interviews, has extensive experience in the collection of information from victims of crime and has a reputation for collecting such information in a sensitive and compassionate manner. Due to the particularly sensitive nature of the issues addressed in this investigation, it was a priority to create the most comfortable rapport between interviewers and participants. Accordingly, only female interviewers were used. In addition, only SRBI's most experienced interviewers were selected. All interviewers had achieved a rating of Level 4 (the highest rating for quality and experience), had been with the firm more than a year and had undergone several interviewer-training courses.

Before the commencement of data collection, project staff along with SRBI interviewers and supervisors participated in a project training session. All interviewers had previously been trained in the general principles of survey research and interviewing, including the role of the interviewer in the survey process, how to reassure participants about the confidentiality of the information collection, how to control irrelevancies and digressions without offending the participant, how to avoid biasing responses with verbal cues and an understanding of sampling procedures and the importance of rigorous adherence to sampling procedures in the field. The specific training for this investigation included discussing the objectives of the data collection, reviewing standard interviewing procedures, discussing procedures specific to this survey and reviewing the survey instrument. The training session allowed the use of the CATI equipment to gain familiarity with the survey instrument.

Throughout the data collection, an experienced staff of telephone interview supervisors was used to supervise the interviewers, to monitor quality control and to maintain production rates. For this investigation, at least 10% of each interviewer's work was directly monitored. Supervisors rated each interviewer on the accuracy of the key-entry of interview responses and on interviewing skills. The specific interviewing skills evaluated included general professional conduct throughout

the interview, voice clarity, reading the survey instrument verbatim, whether or not ambiguous or confusing responses from the participant were clarified, how well questions from the participant were handled without alienating the participant or biasing the participant's responses and avoiding bias by either comments or vocal inflection.

## **G. Survey Procedures**

### **1. Preliminary Contact**

Two weeks prior to the initial contact attempts, potential participants were sent letters from the research staff informing them that they would be contacted by telephone in the near future. This letter explained the purpose of the study, assured confidentiality, emphasized the voluntary nature of participation, commented on risks and benefits, provided a mechanism to withdraw prior to the phone call (i.e., a prepaid return letter was included in the advance letter that allowed the subject to indicate that they did not wish to be contacted), and otherwise conformed to standards for the protection of human subjects.

### **2. Conducting the Interview**

All data for the current investigation were collected by telephone interview. Telephone interviews are more cost- and time- effective than in-person interviews and provide the respondent with greater confidentiality (Frey & Oishi, 1995). When compared to mail surveys, telephone interviews allow participation from subjects who are illiterate or have difficulties with reading. Additionally, when compared with mail surveys, telephone interviews involve improved time-efficiency, dramatically improved response rates, and greater accuracy in the collection of sensitive information (Bourque & Fielder, 1995).

Trained interviewers contacted those potential participants who had not declined to participate in the survey. As approved by the VA Boston Healthcare System's Internal Review Board, the telephone contact script required an oral informed consent to conduct the interview. At the beginning of the interviewing script, the interviewer summarized the key elements for informed consent, including the purpose of the project, the potential sensitivity of some of the questions, the confidentiality of responses, the expected interview length (burden), the risks and benefits associated with participation, the voluntary nature of participation, and the ability to refuse to answer any question or withdraw at any time. The interviewer asked whether the participant understood these conditions, and reread the script or answered the participant's questions if they did not. The interviewer also offered SRBI's toll-free number and the means to contact the study's principal investigator to ask questions or to confirm the authenticity of the call and/or caller. Then, the interviewer asked the participant's permission to proceed with the interview. The interviewers could begin an interview only if the participant gave his or her consent to proceed with the survey.

Although the sample was drawn by DMDC on the presumption that everyone in the sample would be eligible for the survey, the telephone interview began with a series of screening questions to ensure that the participant was eligible. The interviewer asked a series of seven questions to confirm that the participant was a former member of the Reserve Components of the Armed Forces and that the participant was never drafted or had never enlisted in the Active Duty Forces (other than for training purposes only). If the participant had been ordered to Active Duty service (other than for training purposes only) prior to September 7<sup>th</sup>, 1980 the interviewer confirmed that they did not serve for the full time for which they were called, and if Reservists had been ordered to Active Duty service after September 7<sup>th</sup>, 1980, the interviewer confirmed that they did not serve for the full time for which they were called or for at least 24 months of continuous active duty. If the potential participant did not meet these qualifications then they did not qualify for participation and the interviewer terminated the conversation.

If the participant met inclusion criteria and consented to be interviewed, the interviewer proceeded with the interview. The interviews averaged 40 minutes in length. If necessary, surveys were rescheduled at a time convenient for the respondent. Participant's responses were directly entered into a database using the CATI system. Responses in the database were coded only with a participant identification number assigned by SRBI. Identifying personal information is not held in this database, but is stored separately and securely under the supervision of the principal investigator. Once the survey was completed, the participant had the opportunity to offer any suggestions they had for improving the survey and were given contact information for the principal investigator if they wanted to contact her for information about the study or about counseling resources in their area.

### **3. Procedures to Encourage Participation**

Prior to the interview the following strategies were used to encourage participation in the study:

- Attention to the order and wording of specific questions; Extensive review of the survey instrument ensured that the specific questions were clear and easy to understand. More sensitive questions were presented later in the interview when the participant was more likely to feel comfortable with the interviewer.
- Using skip patterns to limit the length of the interview; The interview averaged 40 minutes in length, but the programmed skip patterns allowed for a strategy whereby each participant was asked only those questions most relevant to his/her experiences.
- Interviewer training and selection; As reviewed above, the interviewers for this study were limited to a group of thoroughly trained and experienced female interviewers, carefully monitored by SRBI's field staff.
- Advance letter and contact information from the study team; The advance letter and contact information allowed participants to talk to members of the study team at any time. Some participants who were initially unsure about their participation decided to participate after reading the advance letter and/or having their questions answered by study personnel.

During the interview the following strategies were used to encourage participation in the study:

- Use of a carefully developed initial contact script; Given that most refusals take place before the interviewer has completed the survey introduction, a positive first impression of the interviewer is a key to securing the interview. Thus, during the initial telephone contact, the interviewer immediately established VA sponsorship, explained the social utility of the survey, and assured the participants that they would not have to answer any questions that they did not want to.
- Flexible hours for scheduling interviews; Initial telephone contact was attempted during evening and weekend hours in each time zone. If the respondent preferred to conduct the interview at a different time, the interviewer rescheduled the interview at a time and number convenient for the respondent.

- A generous call-back strategy; Twenty-five callback attempts on different days and at different times, over a period of at least three months, were made to reach a respondent at a working number. Once a case was reached, unlimited callbacks were made until the case reached its final disposition.
- Refusal conversion procedures and strategies; In the interest of obtaining a random sample of all eligible participants, all interviewers received special training on how to respond to initial reluctance, disinterest or hostility during the contact phase of the interview.
- Careful monitoring of interviews and interviewers; As reviewed above, all interviewers were carefully supervised by SRBI's experienced field staff.
- Review of field outcome data; The field outcome data in a sample reporting file, derived from both the sample control and CATI files, was regularly reviewed so that patterns and problems in both response rate and production rates could be detected and analyzed.
- Extended field period; This investigation included an extended field period which permitted the eventual interview of respondents who were temporarily out of town, as well as time to overcome the resistance of passive refusals and convert active refusals and terminations.

#### **4. Summary of Field Outcomes**

As reviewed above, the total population of former Reserve Components of the U.S. Armed Forces was 935,563 according to the specifications used by DMDC to identify these individuals from their records. A total sample of 22,500 military personnel was drawn for the survey from the population of 935,563. The sample of 22,500 military personnel was selected by DMDC from its records in accordance with the stratified random sampling plan, with strata defined in terms of the seven components of the Reserve forces. Males and females were considered as two separate populations.

A total of 4,022 interviews, including 76 partial interviews, were conducted with eligible respondents by the end of the seven month field period, August 7, 2002 to March 5, 2003. A total of 2,338 interviews out of a target of 2,500 (93.5%) resulted from the female sample. By contrast, only 1,684 interviews out of a target of 2,000 (84.2%) were conducted for the male sample. Among these 4,022 interviews was a subset of 76 partial interviews for which insufficient information was obtained on the primary outcome and predictor data variables. As a result, the total number of eligible respondents included in the data analysis file was 3,946: males 1,627 and females 2,319. The distribution of the interviews for the 3,946 military personnel, who are defined as participants, by component and gender is presented in Table E.

Table E: Distribution of Participants by Component and Gender

<b>Component</b>	<b>Male</b>		<b>Female</b>		<b>Total</b>
Army Reserve	829	50.95%	1365	58.86%	2194
Army National Guard	424	26.06%	418	18.03%	842
Naval Reserve	148	9.10%	228	9.83%	376
Marine Corps Reserve	129	7.93%	20	0.86%	149
Air Force Reserve	66	4.06%	210	9.06%	276
Air National Guard	29	1.78%	72	3.10%	101
Coast Guard Reserve	2	0.12%	6	0.26%	8
<b>TOTAL</b>	<b>1627</b>	<b>100.00%</b>	<b>2319</b>	<b>100.00%</b>	<b>3946</b>

In addition to those who completed the full or partial interview, the screening procedures identified another 1,611 subjects who were eligible to participate in the survey but did not do so. The number of eligible non-completes was similar for the male ( 771) and female ( 840) samples. The distribution of the total eligible sample of 5, 633, including completes, partials, and non-completes, is presented in Table F by component and gender.

Table F: Distribution of Total Eligible Sample by Component and Gender

<b>Component</b>	<b>Male</b>		<b>Female</b>		<b>Total</b>
Army Reserve	1243	50.63%	1851	58.24%	3094
Army National Guard	632	25.74%	581	18.28%	1213
Naval Reserve	213	8.68%	323	10.16	536
Marine Corps Reserve	182	7.41%	25	0.79%	207
Air Force Reserve	131	5.34%	292	9.19%	423
Air National Guard	49	2.00%	97	3.05%	146
Coast Guard Reserve	5	0.20%	9	0.28-%	14
<b>TOTAL</b>	<b>2455</b>	<b>100.00%</b>	<b>3178</b>	<b>100.00%</b>	<b>5633</b>



During the screening process, a total of 3,288 potential survey participants were identified as ineligible for the survey based on their military experiences (e.g., had served in the Active Duty Forces). There were more ineligible males (1,799) than women (1,489) in the sample. The distribution of the non-qualified sample is presented in Table G by component and gender.

Table G: Distribution of Non-qualified Sample by Component and Gender

<b>Component</b>	<b>Male</b>		<b>Female</b>		<b>Total</b>
Army Reserve	790	43.91%	948	63.67%	1738
Army National Guard	364	20.23%	269	18.07%	633
Naval Reserve	205	11.40%	100	6.72%	305
Marine Corps Reserve	170	9.45%	21	1.41%	191
Air Force Reserve	216	12.01%	99	6.65%	315
Air National Guard	49	2.72%	46	3.09%	95
Coast Guard Reserve	5	0.28%	6	0.40%	11
<b>TOTAL</b>	<b>1799</b>	<b>100.00%</b>	<b>1489</b>	<b>100.00%</b>	<b>3288</b>

After incorporating various sources for the classification of disposition codes in survey research, the American Association for Public Opinion Research (AAPOR) has recommended operational definitions and standard formulae for the calculation of survey completion or outcome rates. The purpose is to ensure comparability in names and consistent calculation with the elements that form the rates among surveys. In the report “Standard Definitions” available on website [www.aapor.org](http://www.aapor.org), a summary is provided of the more common terms used to evaluate the outcome of a survey: response rates, cooperation rates, refusal rates, and contact rates. These rates are calculated from the totals of the survey disposition codes noted for each case by the interviewers. AAPOR has classified 49 survey case final disposition codes recommended for telephone surveys into four major types: (1) interviews; (2) eligible cases that are not interviewed (non-respondents); (3) cases of unknown eligibility/non-interview; and (4) cases not eligible. While these disposition codes are not yet standard, AAPOR is urging CATI software companies to incorporate these definitions into their software reports and is asking scientific journals to adopt AAPOR standards in their evaluation and publication of articles. The contractor for this investigation, SRBI, adopted a more refined classification system of 59 disposition codes peculiar to the CATI system after adaptation to this investigation’s design and population. These 59 codes are summarized, with some categories collapsed, in Table H. The names used by SRBI that correspond to the four major groupings by AAPOR system are, respectively: (1) complete; (2) live/not concluded, qualified refusal, qualified callback; (3) never located, not located/bad number, refused prior to screen; and (4) screen out.

There is no single number that reflects total survey performance and quality. As there are multiple definitions for each of the major outcome rates, it is important to list the computational formula within the report of the survey for the outcome rates calculated. AAPOR provides six definitions of response rates, which vary depending on how partial interviews are considered and how cases of unknown eligibility are handled. Some authors assume that the proportion of eligible and ineligible cases among the cases whose eligibility status is known would also apply to the cases of indeterminate eligibility, while others consider what is known about some or all of the individual cases and estimate eligibility on the basis of what is known from contact attempts.

The outcome rate that AAPOR has named Response Rate 1 (RR1), or the minimum response rate, is the number of complete interviews divided by the total number of interviews (complete plus partial) plus all eligible non-interview plus all unknown eligibility/non-interview. The denominator is equivalently defined as the number of interviews (complete plus partial) plus the number of non-interviews (refusal and break-off plus non-contacts plus others) plus all cases of unknown eligibility. In terms of the four major types of disposition cases numbered in the paragraphs above, the denominator is formed as the sum of (1) plus (2) plus (3).

$$RR1 = \frac{\text{completes}}{(\text{completes} + \text{partials} + \text{eligible non-interview} + \text{cases of unknown eligibility})} \times 100$$

Response Rate 2 (RR2) counts partial interviews as respondents. The denominator is the same. Thus,

$$RR2 = \frac{\text{completes} + \text{partials}}{(\text{completes} + \text{partials} + \text{eligible non-interview} + \text{cases of unknown eligibility})} \times 100$$

The cooperation rate is the second type of outcome rate mentioned above. This represents the percentage of all cases interviewed of all eligible units ever contacted. Thus, the minimum cooperation rate, COOP1, is the number of complete interviews divided by the number of interviews (complete plus partial) plus the number of non-interviews that involve the identification of and contact with an eligible sample member. Thus, the minimum cooperation rate is

$$COOP1 = \frac{\text{completes}}{(\text{completes} + \text{partials} + \text{eligible non-interview and reached} + \text{eligible/notinterviewable})} \times 100$$

Another form of the cooperation rate counts partial interviews in the numerator as respondents. An alternate form of the cooperation rate defines those unable to do an interview as also incapable of cooperating and they are excluded from the denominator.

A third type of outcome rate suggested by AAPOR is the contact rate, which has three different definitions or formulae for computing statistics for this measure. In each definition, the numerator of the contact rate is larger than the numerator of response rate (RR1) or (RR2) because it is the sum of cases interviewed (complete plus partial) plus cases contacted or reached but who may have refused or were not able to be interviewed for any one of various reasons, including temporarily away, health, hearing problem, etc. For one form of the contact rate, CON1, the denominator is defined in the same way as the denominator of response rate (RR1 or RR2). For another form, CON3, the denominator includes only known eligible cases.

$$\text{CON3} = \frac{(\text{completes} + \text{partials} + \text{eligible non-interview and reached} + \text{eligible/not interviewable})}{(\text{completes} + \text{partials} + \text{all eligible/ non-interview})}$$

A final outcome rate used by some survey firms including SRBI, but not used by AAPOR, is called the participation rate. This statistic represents an important measure of potential sample bias because it indicates the degree of self-selection by potential respondents into or out of the survey. The participation rate incorporates those found to be ineligible in the formula and is calculated as the number of completed interviews (full + partial) plus those that screen out as ineligible, divided by the total number of completed interviews (full + partial), terminated interviews, and refusals to interview. It should be noted that the inclusion of screen outs in the numerator and denominator is algebraically equivalent to discounting the refusals by the estimated rate of ineligibility among refusals. As an algebraic expression, the participation rate is calculated as:

$$\text{Participation Rate \%} = \frac{\text{completes} + \text{partials} + \text{screen-outs} + \text{ineligibles}}{(\text{completes} + \text{partials} + \text{screenouts} + \text{ineligibles} + \text{refusals})} \times 100.$$

The sum of the cases with the individual disposition codes needed to calculate these outcome rates are tabulated below:

- 4,022 completed and partial interviews (3,946 full and 76 partial);
- 293 qualified callbacks (completed screen by telephone or mail);
- 3,288 cases in which the sample respondent was not eligible to be interviewed (said they were never in the Reserves/National Guard or served on Active Duty long enough to make them ineligible-screenout);
- 288 were not able to be interviewed (deceased, out of the country, incapacitated or deaf);
- 1,280 eligible but qualified refusals (completed the screener by phone or mail);
- 2,866 refusals prior to screen;

Table H provides a summary of the final disposition for the full sample of 22,500 Reservists drawn for the sample.

Table H: Summary of Final Disposition for the Full Sample

<b>Disposition</b>		<b># of Cases</b>	<b>% of Cases</b>
Total Cases=22500		22500	100.00%
Never Located		3730	16.58%
Not Located/ Bad Number		5738	25.50%
Live/ Not Concluded		995	4.42%
Not Interviewable		288	1.28%
Deceased		88	
Away duration		113	
Health		71	
Hearing		16	
Refused Prior to Screen		2866	12.74%
Screen Out		3288	14.61%
Mail - not in	NOT		
Reserves/Active	QUAL	214	
Telephone - not in	NOT		
Reserves	QUAL	818	
	NOT		
Telephone - active duty	QUAL	2256	
Qualified Refusal		1280	5.69%
Qualified Callback		293	1.30%
Qualified Callbacks	QUAL	77	
Mail consent - eligible	QUAL	216	
Complete	QUAL	4022	17.88%

These survey outcome rates as calculated for this study are presented in Table I.

Table I. Survey Outcome Rates Based on Disposition Codes

<b>Survey Outcome</b>	<b>Rate</b>
Response Rate 1	45.1%
Response Rate 2	46.0%
Cooperation Rate 1	70.6%
Cooperation Rate 2	71.9%
Cooperation Rate 3	74.4%
Contact Rate 1	63.9%
Contact Rate 3	95.0%
Participation Rate	65.6%

### **III. Methods of Analysis**

#### **A. Methods Used to Establish Prevalence Rates**

##### **1. Prevalence Analyses**

The first aim of this investigation is to estimate prevalence and confidence intervals of military sexual trauma in the population of former Reservists based on stratified random samples of 2000 males and 2500 females. In the original plan, the methods proposed to achieve this aim utilized weighted estimates of individual military strata values according to the sampling design. Non-responses are handled by weighting responding units by the inverse of the probability of selection and response in the weighting stratum estimators. The weighted stratum estimators adjust the distribution in the observed sample so as to compensate for the distortion that may result from the non-response. In order to estimate the confidence intervals of the prevalence, we estimate the sampling variance, which is a non-linear estimator in the presence of non-response. The Survey Data Analysis (SUDAAN) software package, which can handle this non-linear estimator of the variance in accordance with the stratified sampling design, is used to estimate prevalence and confidence intervals.

First, the association between component and MST was measured. Contingency table analysis was used to look for differences with respect to demographic and military factors among the seven components for males and females separately. Statistical significance was ascertained by examining the coverage of 95% confidence intervals (CI), and no adjustments were made for multiple comparisons. Computations were carried out using standard software (SAS, 1999). We present the estimated prevalence of MST among the different Reserve Components of service in tabular form. As a result of the completed interviews for 1627 males, a total of 439 cases of military sexual trauma (sexual harassment or sexual assault) were found; among the 2319 females who were interviewed, a total of 1394 cases of military sexual trauma were found.

##### **2. Problems of Ineligibility and Misclassification**

When the data collection was underway two problems were encountered with the DMDC databases used to tabulate the frequency distribution of the target population and design the sampling scheme: (1) substantial ineligibility rate, with military personnel being labeled as members of the target population when they were not, and (2) high rates of misclassification of the Reserve Component classification by DMDC when compared with the classification self-reported

during the interview (e.g., DMDC has a military person classified as Army Reserve, while the individual's self-report during the telephone interview is Army National Guard).

With regard to the first problem, the substantial ineligibility rate, despite extensive work by project staff and DMDC programmers to provide a sample representative of the target population (e.g. former Reservists who had never been drafted, never enlisted, and, if called up to the Active Duty Forces, did not serve for the full time for which they were called), it became clear that the sample identified by DMDC did not represent the population required for this investigation. DMDC was able to identify several reasons why their sample did not match the target population. First, DMDC could not rule out many individuals who were drafted to or enlisted in the active duty forces. DMDC's active duty records begin in the mid-1970's. This means that anyone who was drafted or enlisted prior to that time (e.g., Vietnam-era veterans) can not be identified by DMDC and so were included in the sample provided to the Reservist project staff. Second, DMDC was also unable to rule out many Reservists who were called up to active duty. DMDC has only 4 "contingency files" that can be used identify those Reservists who have been activated (Desert Shield/Storm, Operation Southern Watch, Bosnia, Haiti, and Kosovo). Therefore, Reservists who were called up during a conflict that the DMDC does not track, for example, Libya, or called up during peacetime, cannot be identified using the DMDC files. Third, project staff learned that the DMDC files contain numerous errors. For example, 10% of the individuals contacted report that they were never members of the Reserves or had enlisted in the Reserves but never reported for duty. In total, 37.0% (n=3,288) of the 8,883 individuals contacted to participate in the investigation were not members of the target population and therefore ineligible to participate in the investigation. While DMDC was able to identify the reasons why their sample did not match the target population, they were unable to resolve the issue. The DMDC databases simply do not have the type of information needed to identify the target population.

As stated previously, the second problem encountered was that there were substantial rates of misclassification of the specific Reserve Component as identified by DMDC when compared to the primary component identified by self-report during telephone interview. Moreover, the misclassification rates of the stratification variable, Reserve Component, among males were substantially higher than those among females for some of the seven Reserve Components. The majority of the misclassification appears to lie with the Army National Guard versus Army Reserves and with Air National Guard versus Air Force Reserves. For example, within the group of 829 males for whom DMDC classification was Army Reserves, 419 (or 50.5%) confirmed that they served in the Army Reserves, but 405 (or 48.9%) self-identified as truly Army National Guard (the remaining 5 individuals self-identified as one of the 5 other components). Similarly, among 66 males for whom DMDC classification was Air Force Reserves, 29 (or 43.9%) confirmed that they served in the Air Force Reserves, but 32 (or 48.5%) self-identified as truly Air National Guard (the remaining 5 individuals self-identified as one of the 5 other components). Upon examination of a subsample of specific cases, DMDC was able to offer an explanation for this pattern of findings. Per military regulations, members of the Reserve Components cannot be retired as a member of the Army National Guard or Air National Guard. Accordingly, upon retirement, a member of the Army National Guard will be listed as a member of the Army Reserves. Similarly, upon retirement a member of the Air National Guard will be listed as a member of the Air Reserves. In these cases, the Reserve Components identified by DMDC and used in the sampling plans for this investigation are less accurate than the Reserve Components identified by respondents' self reports. DMDC also confirmed that, among former Reservists, males are more likely to reach retirement age than are females. In this report, an attempt has been made to address some of the statistical issues that have arisen due to the problem of ineligibility and misclassification.

### 3. Modification of Prevalence Analyses

The statistical methods commonly applied for estimation of prevalence of a condition in an epidemiologic study require enumeration of the target population with the assumption of absence of misclassification of the factor that was used for stratification in the sampling design. As a result of the realization of both ineligibility and misclassification of the stratification variable in this population database, statistical methodology was developed for application to this dataset. The methodology that had been developed by other authors (Espeland and Hui, 1987) for the general problem of misclassification, did not apply to the set of variables collected in the present dataset.

Accordingly, methodology was developed to compensate and adjust for the misclassification of the stratification variable, the seven components of the Reserve forces, which had formed the basis of the sampling design. This methodology involved estimating the eligible target population of true Reservists and estimating the eligible target population by component as it would be self-reported. Following these two steps, statistical weights were calculated to be used in conjunction with the responding sample to represent the estimated number of members in each component of the target population. Subsequent to the calculation of the statistical weights, the estimated prevalence of MST by self-reported Reserve Component was estimated. For the estimated target population, the estimated frequency distribution of those who experienced MST (i.e., the number of individuals in the entire population estimated to have experienced MST) by Reserve Component is also reported.

### 4. Statistical Weights

To proceed with estimation of prevalence in this survey through the SUDAAN software, statistical weights were calculated. For each subject a unique statistical weight was computed to reflect the number of individuals in the population that the selected sample member represented. These statistical weights are provided in Table J for male participants and in Table K for female participants. When one subject is missing a measurement on just one variable involved in a multivariate analysis, if that subject were to be deleted from the analysis, the sum of the statistical weights of the subjects remaining would not equal the size of the population for which inference is to be made. The solution to this issue used by some survey statisticians is to impute every missing value for covariates so that the weight structure will be preserved (Hosmer & Lemeshow, 2000). This solution was adopted for the current investigation.

Table J: Male Reservists: Estimated Statistical Weights by DMDC and Self-Reported Component

<b>Component</b>	<b>DMDC Component</b>	<b>Self Reported Component</b>
Army Reserve	284.3184560	284.5784753
Army National Guard	287.5377358	285.8819876
Naval Reserve	222.2094595	223.9530201
Marine Corps Reserve	254.2015504	254.2015504
Air Force Reserve	318.8333333	312.6000000
Air National Guard	277.8620690	298.9672131
Coast Guard Reserve	528.0000000	528.0000000

Table K presents the estimated statistical weights, adjusted for ineligibility, sampling, and response, and based on estimated distribution of eligible members of Reserve Component by DMDC classification, as well as the estimated statistical weights based on self-reported classification of Reserve Component during interview among females.

**Table K: Female Reservists: Estimated Statistical Weights by DMDC and Self-Reported Component**

<b>Reserve Component</b>	<b>DMDC Component</b>	<b>Self-Reported Component</b>
Army Reserve	44.6336996	44.7989371
Army National Guard	50.1794258	47.8827160
Naval Reserve	46.7543860	46.7359307
Marine Corps Reserve	42.1500000	42.1500000
Air Force Reserve	44.9428571	44.7894737
Air National Guard	43.0694444	44.3636364
Coast Guard Reserve	46.3333333	46.5000000

## 5. Imputation Method

Complete demographic data were available on all 3946 respondents. Missing data on the age variable for n=140 subjects out of the full sample of n=22,500 males and females were handled by use of the "hot deck" method within adjustment cells (Little & Rubin, 2002). In this method of imputation, missing values are replaced by values from similar responding units in the sample. The value of the variable from a donor available for the record that contains the missing covariate is substituted as the value for the record (the recipient) that has a missing value for that variable. In this instance, records were sorted into 14 strata (adjustment cells) defined by gender and Reserve Component. Within each stratum, subjects were randomly sorted. Missing values within each cell were replaced by recorded values from the subsequent record within the same cell in the data file. The covariate for which this procedure of imputation was followed included age, only. This procedure permitted analysis of the variable age for the complete initial DMDC population. For missing outcome variable, military sexual trauma, the strategy explained in the following sensitivity analyses section was adopted.

## 6. Sensitivity Analyses

Since 34 of the 3946 respondents (15 females and 19 males) had missing outcome data on the primary variable MST, a sensitivity analysis was conducted to assess the potential effect of these missing data. Best case/worst case analyses were performed. First, subjects with unknown outcome were coded "no" to MST (best case MSTDCHT2) and the prevalence analyses rerun. Second, subjects in the unknown outcome group were coded "yes" to MST (worst case MSTDCHT3) and the prevalence analyses rerun. Comparisons were made of these two analyses with the original analysis in which the 34 individuals with missing outcome variable were excluded. Since the prevalence rates for MST for the three cases did not differ substantially, we proceeded by using those only for the most conservative case, the best case in which the 34 with missing outcome for MST were assumed to be "no". The choice was made for the statistical reason that the weight structure be preserved, and for the substantive reason that prevalence estimates and estimates of necessary resources be conservatively projected.



## **B. Methods for Estimating Resources Required to Meet Legal Mandate**

The estimates of the resources necessary to treat Reservists who had experienced MST have two parts: 1) an estimate of the number of Reservists who would be likely to seek care under the provisions of a new benefit and 2) an estimate of the annual utilization and its dollar value per Reservist. The product from multiplying these two parts comprises the total annual estimate. The sections that follow consider each of these elements in turn and derive a best estimate with several sensitivity analyses to give policymakers possible upper and lower bounds for that best estimate.

### **1. Number of Reservists Likely to Seek Care**

This investigation's approach to estimating the number of Reservists likely to seek care related to military sexual trauma was to use a percentage of all Reservists experiencing any level of military sexual trauma, adjusted by reports of whether or not the Reservists reported seeking treatment in the past. This number was further adjusted for the victims' self-reported likelihood of using Veterans Health Administration (VA) services. This approach drew on published reports of rates of treatment seeking for other populations.

New and Berliner (2000) report that while only a minority of adult crime victims seek treatment in the first three months to a year after the incident, the rate of treatment seeking increases over time. For example, in the general population, 12% of victims sought treatment in the first three months, but 23% of those experiencing violent crime sought treatment at another time point (Norris, Kaniasty, & Scheer, 1990; Schwarz & Kowalski, 1992). Victims of sexual assault who had some involvement with the criminal justice system (e.g., through reporting the crime) were more likely to use treatment services than other victims (50% compared to 27% overall, Freedy, et al., 1994). In addition, data from a general population epidemiology investigation of posttraumatic stress disorder (PTSD) found that for study respondents with PTSD the median time to remission was 36 months among those who sought professional treatment and 64 months among those who did not (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995). While the general remission rate was fairly rapid in the first year, for about a third of those who met criteria for a diagnosis of PTSD, the symptoms of PTSD were more chronic, lasting for many years.

The survey used in this investigation allowed estimates of the total number of Reservists who reported: 1) having experienced MST at either of two levels (sexual harassment or sexual assault); 2) having received or currently receiving services related to their MST; and 3) a willingness to seek treatment for their MST at a VA facility, should such care be made available to them. From these survey numbers, the estimate of the number of Reservists likely to seek MST-related care was calculated as the percentage of all Reservists experiencing any level of MST times an estimate of the proportion that might ever seek care if it were available. The latter was calculated separately for male and female victims and equaled the sum of the following three proportions: 1) 1/3 of victims who received help in the months immediately following the incident of MST or later (to reflect persistence of PTSD or other serious problems), 2) the victims (less than 2%) who sought help but did not receive it, and 3) a proportion of the remaining victims who had not yet received any help for their MST.

### **2. Annual Utilization and Dollar Value**

New and Berliner (2000) found that adult crime victims who had experienced sexual assault used significantly more mental health sessions (mean = 42) than physical assault victims (mean = 28) or other adult victims (mean = 18). The average payment for a victim's therapy was \$1,766 (median = \$905). This amount is in keeping with reported mental health benefits for crime victims of between \$2,000 and \$5,000 under the Victims of Crime Act of 1984 as reported in 1992. The

greater utilization reported by New and Berliner for those suffering sexual assault suggests that the costs for their treatment would tend to be at the high end. Suris et al. (unpublished, 2002) found that for a convenience sample of VA patients, MST is associated with above average costs of care in VA. The sample was less than 300 patients, however, and limited geographically.

Source of Utilization Data. The study's primary source of information about MST-related utilization was VA's own care for patients who had VA treatment that clinical providers had flagged as being MST-related. Because all MST treatment within the VA is not flagged as such, also included were all women who were treated for PTSD within the VA. This decision was based on clinical experience that suggested that many of these women had experienced sexual trauma and that the treatment for PTSD arising from non-military sexual trauma would likely be similar to that for military sexual trauma in terms of the number of visits and length of care. For fiscal year (FY) 2000, the national databases were searched for utilization flagged as MST-related or for female patients with a diagnosis of PTSD and the unique patients receiving that utilization or diagnosis were identified. Using VA's unique patient-identifier, all the utilization for those patients for FY 1998 through 2002 was then downloaded to an analytic file. The utilization was categorized in two groups, as being for mental health (or substance abuse) care as determined using selected DRGs for inpatient stays and selected codes for outpatient clinic care, or as being for other non-mental-health purposes.

Average utilization amounts were calculated separately for male and female VA patients who have been treated in VA for MST. The female patients with PTSD diagnoses were included with the females receiving MST treatment. Estimates were calculated for two scenarios: a) only services coded as related to mental health care; or b) all health services provided. This separation allows a comparison of the possible cost of a MST-treatment benefit for Reservists presuming that MST results only in conditions that manifest as mental health disorders or whether treatment for some physical health problems might also be MST-related.

Because VA patients receiving MST-related care were about 10 years older, on average, than the MST survey respondents, their utilization (and costs) for physical ailments were likely higher than could be expected for the former-Reservist population, at least over the next decade. Consequently, the evaluation team chose the mental health care averages as the preferred cost estimates and present the higher estimates as a sensitivity analysis for the upper bound. To determine the possible effect of age differences on the cost estimates, average costs were calculated for VA MST patients with ages that were within the interquartile range of survey respondents who experienced MST (that is, between the ages of 33 and 43). In fact, it turned out that average VA costs in FY2000 for outpatient and inpatient care were both about \$200 per patient higher for MST patients between the ages of 33 and 43 than for all MST patients. As this difference is less than 10% of the total cost estimate for VA MST patients, the average cost for MST patients of all ages was used as the average cost per patient in making cost projections.

Source of Cost Data. Two sources of the costs of the care (both for mental and physical health) were used: 1) VA national average budget amounts as defined by the Health Economic Research Center (HERC) in Palo Alto, CA (Wagner, Chen, Yu, & Barnett, 2001; Phibbs, Yu, Lynn, & Barnett, 2003) and inflated by 13.6% (the accumulated rate of inflation in medical care services between CY2000 and CY2003) and 2) private-sector payments using Medicare-reimbursable amounts under its fee-for-service system in the private sector or (for services with no available Medicare amount) VA's reasonable charge adjusted to the Medicare level by multiplying by the average ratio of Medicare reimbursable amounts to VA's reasonable charges across all the services for which both amounts existed. Costs were not adjusted for differences in patient characteristics (other than gender) because of the small numbers. The use of national averages means that the estimates are not adjusted for any geographic differences in where reservists might seek MST-related care.

Both VA and non-VA cost estimates were calculated because not all survey respondents reported that they would use VA services, if they were available. Also, VA purchases some care for

veterans who either have service-connected disabilities or who live too far from a VA medical center that offers the services they need. The average fees that VA might pay for such contracted care were not available, so Medicare rates (or their proxies) were used to give policymakers a sensitivity analysis.

Finally, the cost estimates were related to the timing of the Reservists' needs for treatment. As noted in the results section, there is both an annual flow of potential patients that arises from annual separations from Reserve/Guard status and a substantial backlog of previously separated Reserve/Guard personnel for whom the benefit becomes immediately available. Estimates are provided for the cost of treating patients who would come from the annual flow of separations. Separate estimates are provided for treating patients who represent the backlog of separated Reserve personnel. Both sets of estimates presume that the patient population would come to the VA (or another provider) in one year from the time at which they become eligible. The estimates are for costs in that year (and, separately, for up to five years following their initial eligibility, on the assumption that they initiate their treatment in the first year of eligibility).

VA's experience with veterans being treated for MST indicates that such an assumption of immediate seeking of treatment is not likely. Time will be necessary to make Reservists aware of the programs and lead them to seek care. The estimates are for the probable fiscal year costs that would be experienced once a program is established and operating, with some patients starting treatment at different times throughout the fiscal year and continuing to the next fiscal year or terminating their care with frequencies similar to those that VA currently experiences among its patients who are being treated for MST. The costs are not adjusted for possible inflation and represent the resources needed in terms of 2003 dollar values.

## IV. Results

### A. Demographic and Military Characteristics of Participants

Selected Demographic Characteristics. Table L presents the frequency and percent distributions of selected demographic characteristics for the male and female former Reservists who comprise the total sample.

Table L: Selected Demographic Characteristics of Study Participants

<b>Demographic Characteristic</b>	<b>Male (N=1,628)</b>		<b>Female (N=2,318)</b>		<b>Total</b>
Age at time of interview					
20 – 29	118	7.2%	265	11.4%	383
30 – 39	931	57.2%	1,145	49.4%	2,076
40 – 49	348	21.4%	563	24.3%	911
50 – 59	94	5.8%	265	11.4%	359
60 – 69	120	7.4%	65	2.9%	185
70 – 79	17	1.0%	15	0.6%	32
Race					
White	1,271	80.1%	1,468	65.2%	2,739
Black/ African American	172	10.8%	561	24.9%	733
Hispanic/ Latino	81	5.1%	115	5.1%	196
American Indian/ Alaska Native	12	0.8%	28	1.3%	40
Asian/ Pacific Islander	18	1.1%	23	1.0%	41
Biracial	33	2.1%	56	2.5%	89
Marital Status					
Married/ Living as a Couple	1,198	75.1%	1,266	55.9%	2,464
Separated/ Divorced	171	10.7%	409	18.0%	580
Widowed	6	0.4%	38	1.7%	44
Single/ Never Married	221	13.8%	552	24.4%	773
Income					
<\$15,000	56	3.6%	160	7.2%	189
\$15,000 - \$34,999	312	20.1%	547	24.8%	859
\$35,000 - \$54,999	447	28.8%	585	26.4%	1,479
\$55,000 - \$74,999	291	18.8%	421	19.0%	712
\$75,000 - \$94,999	201	13.0%	222	10.0%	423
>\$95,000	243	15.7%	278	12.6%	521
Education					
8 <sup>th</sup> Grade or Less	2	0.1%	-	-	2
Some High School	46	2.9%	11	0.5%	57
High School Graduate/ GED/ Equivalent	390	24.5%	304	13.4%	694
Vocational/ Technical Training	79	5.0%	75	3.3%	154
Some College/ Two-Year College Grad	553	34.6%	985	43.5%	1,538
Four Year College Grad	292	18.3%	489	21.6%	781
Some/ Completed Grad or Prof School	233	14.6%	402	17.7%	635

**Age.** A comparison of mean ages between each member of the initial target sample (n=22,500), each member determined to be eligible to take part in the survey (n=5,633 ), and each of the study participants (n=3946), stratified by gender and component, was conducted. Ages for all groups were computed as of January 1, 2002. Computations of mean age for the initial target sample and eligible sample groups were based on age, gender, and component data provided by DMDC. Computations of mean age for the participant sample were based on self-reported age, gender, and component data. The comparison between the initial target sample and the eligible sample was conducted to determine how closely the sample screened as eligible represented the initial population as defined by DMDC. The comparison between the eligible sample and the study participants was conducted to look for evidence of sample bias. The mean ages for these three groups are presented in Table M. Although statistics are presented for the initial target sample as enumerated, due to the ineligibility found in that group, concern should be tempered. The comparisons of interest are those of eligible samples versus study participants for each gender. There is some evidence of selection bias in that the study participants are slightly older than the eligible sample for 12 of the 14 comparisons formed by the strata. Given this, should age prove to be related to the selected outcome variable in a particular analysis, one would want to adjust for age in analyses designed to measure the association of Reserve Component with the selected outcome.

**Table M. Mean Age for Target Sample, Eligible Sample, and Study Participants by Component and Gender**

<b>Component</b>	<b>Male</b>			<b>Female</b>		
	<b>Target Sample (N=10,000)</b>	<b>Eligible Sample (N=2,455 )</b>	<b>Study Participants (N=1,628)</b>	<b>Target Sample (N=12,500)</b>	<b>Eligible Sample (N=3,178)</b>	<b>Study Participants (N=2,318)</b>
Army Reserve	38.3	38.0	38.8	35.1	36.8	38.4
Army National Guard	36.2	36.0	39.7	30.8	32.3	36.7
Naval Reserve	45.6	42.3	43.9	41.4	43.1	45.5
Marine Corps Reserve	34.8	32.5	34.2	34.3	33.2	35.3
Air Force Reserve	52.8	46.4	44.6	39.9	41.1	44.5
Air National Guard	44.1	39.7	44.2	35.1	37.2	40.9
Coast Guard Reserve	37.8	38.4	43.5	36.6	40.0	36.7

\*The classification of eligible personnel is an estimate and derived from the frequency distribution for specific Reserve Components and the error rates calculated from the samples of males and females who were reached for screening to determine eligibility (See “Methods Used to Establish Prevalence Rates”).

**Gender.** Cross tabulation of the gender variable provided by the DMDC database with the gender variable provided during the self-report interview indicated 6 females and 5 males misclassified. For the prevalence analyses, the DMDC classification was retained in order to preserve the structure of the sampling design and statistical weights because the potential misclassification is not known in the portion of the population who were not sampled, nor in those sampled who did not take part in the interview. A basic principle of epidemiology is uniformity in opportunity for re-classification. However, for the remainder of the statistical analyses, the self-report classification was retained given the presumed greater reliability of the interview data. Because the telephone interviewer had the opportunity to check the gender status through follow-up questions designed

specifically for male or female participants, it is unlikely that these misclassifications are keying errors made during the telephone interview, whereas the DMDC classification comes from a data file which is acknowledged by its managers to have an error rate.

**Selected Military Characteristics.** Table N presents the frequency and percent distributions of selected military characteristics for the male and female former Reservists who comprise the total sample.

**Table N: Selected Military Characteristics of Study Participants**

<b>Military Characteristic</b>	<b>Males (N=1,628)</b>		<b>Females (N=2,318)</b>		<b>Total</b>
<b>Year First Served (in Prim Comp)</b>					
1940s	1	0.1%	0	0.0%	1
1950s	77	4.8%	5	0.2%	82
1960s	57	3.5%	13	0.6%	70
1970s	121	7.5%	202	8.8%	323
1980s	964	59.8%	1,381	60.2%	2,345
1990s	391	24.3%	691	30.1%	1,082
2000s	1	0.1%	2	0.1%	3
<b>Number of Years Served (in Prim Comp)</b>					
0 – 4	329	23.6%	636	33.8%	965
5 – 9	747	52.7%	958	49.8%	1,705
10 – 19	203	14.0%	299	17.4%	502
20 – 29	73	5.1%	47	3.7%	120
30 – 39	49	3.7%	2	0.2%	51
40+	13	1.1%	0	0.0%	13
<b>Pay Grade When Left Reserves/ Guard</b>					
Junior Enlisted	962	60.9%	1,323	65.1%	2,285
Senior Enlisted	470	29.7%	495	24.2%	965
Warrant Officer	12	0.8%	4	0.1%	16
Officer	135	8.7%	210	10.3%	345
<b>Type of Separation from Reserves/ Guard</b>					
Honorable	1,356	85.3%	1,937	86.9%	3,293
General under Honorable Conditions	197	12.4%	247	11.1%	444
Other than Honorable Conditions	37	2.3%	46	2.1%	83
<b>Service Connected Disability Status</b>					
Yes	52	3.3%	113	5.0%	165
No	1,547	96.7%	2,167	95.0%	3,714

## B. Prevalence Rates of Military Sexual Trauma

In Table O the estimated population prevalences of military sexual trauma are presented for males and females, stratified by self-reported Reserve Component. Among males the estimated prevalence of MST ranges from 21.3% for Air National Guard to 28.7% for both Army National Guard and Marine Corps Reserve; the estimated population prevalence for Coast Guard Reserve is based on a small number of only 2 respondents of whom 1 reported MST. Among females, the estimated population prevalence of MST ranges from 57.1% among Navy Reserve to 75.0 % among Marine Corps Reserve; the estimated population prevalence for Coast Guard Reserve is based on only 4 respondents of whom 1 reported MST. For the seven components pooled, the estimated prevalence of MST among males is 27.2 %; for females the estimated prevalence is 60.0 %.

Table O. Frequency Distributions of Estimated Eligible Population and Estimated Population Prevalence Rates by Self-Report of Primary Component and Gender as Defined by DMDC

Component	Males		Females	
	N	Prevalence	N	Prevalence
Army Reserve	126,922	25.6	50,578	58.8
Army National Guard	230,135	28.7	31,028	60.6
Naval Reserve	33,369	24.8	10,796	57.1
Marine Corps Reserve	32,792	28.7	843	75.0
Air Force Reserve	10,941	25.7	5,957	60.2
Air National Guard	18,237	21.3	6,832	68.8
Coast Guard Reserve	1,056	(50.0)*	186	(25.0)*
*Prevalence estimates for Coast Guard Reserve are based on small sample size of <5 respondents in cells for both males and females and so are considered to be unstable estimates.				

The estimated population prevalences for six additional outcomes related to military sexual trauma are presented by gender in Table P. These additional outcomes include: 1) a variable that signifies experiences of military sexual trauma experienced by former Reservists specifically while on Active Duty for Training status, 2) a variable that signifies experiences of sexual harassment that occurred during military service, not including sexual assault or rape, 3) a variable that signifies experiences of sexual assault (i.e., unwanted physical contact of a sexual nature, including rape) that occurred during military service, 4) a variable that signifies attempted or completed rape that occurred during military service, 5) a variable that signifies the self-report of symptoms indicative of a diagnosis of PTSD specifically related to military sexual trauma within the past month, and 6) a variable that signifies the self-report of symptoms indicative of a diagnosis of PTSD related to military sexual trauma at anytime since the trauma occurred.

**Table P. Estimated Prevalence Rates of Selected Outcomes Related to Military Sexual Trauma**

Outcome	Male (N=453,452)		Female (N=106,220)	
	%	CI*	%	CI*
Any Military Sexual Trauma**	27.2	25.0 – 29.4	60.0	58.0 – 62.0
1) MST During ADT Status	16.4	14.5 – 18.2	49.2	47.2 – 51.2
2) Sexual Harassment	27.2	25.0 – 29.3	59.6	57.6 – 61.6
3) Sexual Assault	3.5	2.6 – 4.4	23.3	21.6 – 25.0
4) Rape	1.2	0.7 – 1.8	11.1	9.8 – 12.3
5) Current PTSD Related to MST	0.8	0.3 – 1.2	2.3	1.7 – 2.9
6) Lifetime PTSD Related to MST	1.7	1.1 – 2.3	8.3	7.2 – 9.5

\*Estimated population prevalence rates and 95% confidence intervals were calculated by gender using SUDAAN to account for the stratified sample survey design with unequal probabilities of selection in seven strata defined by Reserve Component.

\*\*Computed from variable MSTDCHT2, which assumes “no MST” for 15 females and 19 males who are missing information on the primary outcome variable of MST.

Note: Statistical weights were calculated by gender (DMDC-QSEX) for estimated population sizes and applied to cells for gender by DMDC to estimate population prevalence rates.



It is of further interest to present the frequency distribution of MST in the estimated target population according to the self-reported Reserve Component by gender. Among the target population of 453,452 males, fully 123,400 are estimated to have experienced MST. Among the 106,220 members of the female target population, 63,698 members of the Reserve Components are estimated to have experienced MST. The frequency distributions are presented by component and gender as provided by DMDC in Table Q.

Table Q. Estimated Population Frequencies of Military Sexual Trauma Based on Self Reported Classification of Component by Gender.

<b>Component</b>	<b>Male (N=453,452)</b>	<b>Female (N=106,220)</b>
Army National Guard	66,039	18,818
Army Reserve	32,442	9,746
Naval Reserve	8,286	6,169
Marine Corps Reserve	9,405	632
Air National Guard	3,887	4702
Air Force Reserve	2,813	3583
Coast Guard Reserve	528	46
Total	123,400	63,698

For the purposes of informing the economic analyses, it is also of interest to present the frequency distribution of military sexual assault (not including other forms of MST) in the estimated target population according to the self-reported Reserve Component by gender. Among the target population of 453,452 males, fully 15,635 are estimated to have experienced sexual assault. Among the 106,220 members of the female target population, 24,498 members of the Reserve Components are estimated to have experienced sexual assault. The frequency distributions are presented by component and gender as provided by DMDC in Table R.

Table R. Estimated Population Frequencies of Military Sexual Assault Based on Self-Reported Classification of Component by Gender.

<b>Component</b>	<b>Male (N=453,452)</b>	<b>Female (N=106,220)</b>
Army National Guard	10,578	7,901
Army Reserve	3,700	11,334
Naval Reserve	224	2,243
Marine Corps Reserve	508	169
Air National Guard	0	1,597
Air Force Reserve	625	1,254
Coast Guard Reserve	0	0
Total	15,635	24,498

Note: As with the variable used in the computation of MST, estimated population frequencies of sexual assault are based on a variable in which 49 cases for which this outcome was missing were coded as “no”. The choice was made for the statistical reason that the weight structure be preserved, and for the substantive reason that prevalence estimates and estimates of necessary resources be conservatively projected.

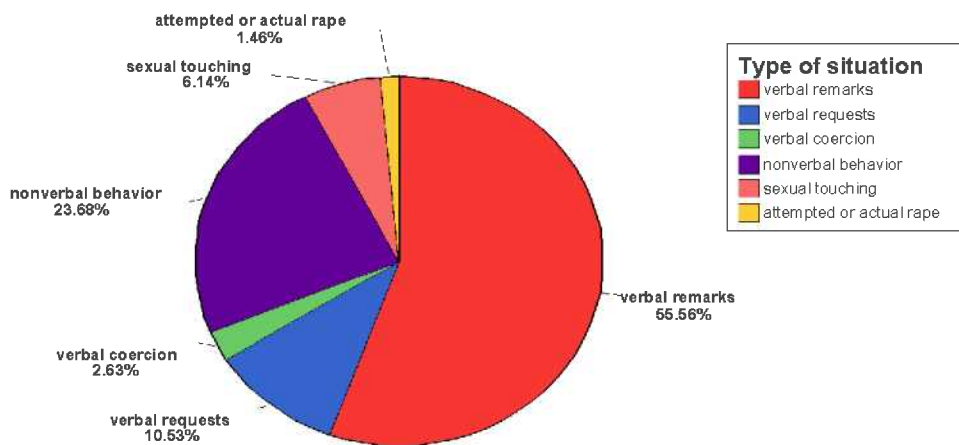
### C. Reservists' Experiences of Military Sexual Trauma

All former Reservists who reported unwanted sexual experiences during their military service were asked a series of questions about the situation that "had the greatest effect" on them. The following figures summarize the information provided by the Reservists about these experiences.

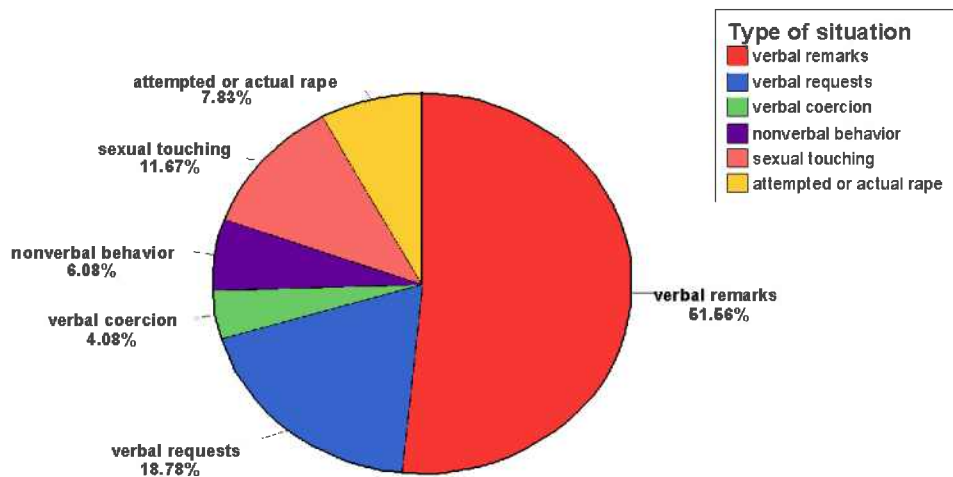
#### What type of situation did the former Reservists report having the greatest effect on them?

All respondents who endorsed experiences of sexual harassment and sexual assault during their military service were asked to identify the type of situation they felt had the greatest effect upon them. Both male and female Reservists most frequently identified "verbal remarks, such as remarks about your gender, your body, or your sex life" as the type of situation that had the greatest effect on them; 55.56% of men and 51.56% of women endorsed this response. For the other types of responses, men were more likely to endorse "nonverbal behavior, such as displaying sexual pictures or making sexual gestures" when compared to women, (23.68% as compared to 6.08%), while women were more likely to endorse "verbal requests, such as asking you on a date or for sex" (18.78% as compared to 10.53%), "verbal requests that involve coercion, such as telling you that you won't get a promotion if you don't go on a date or have sex" (4.08% as compared to 2.63%), sexual touching (11.67% as compared to 6.14%), and attempted or actual rape (7.83% as compared to 1.46%) when compared to men. The relative frequencies of endorsement of these situations that had the greatest impact likely correspond to the relative frequencies that Reservists experienced these events, in general. That is, both women and men are likely to have experience unwanted verbal remarks of a sexual nature at a much higher frequency than presumably more severe experiences, such as unwanted sexual touching or actual or attempted rape. The relative frequencies of the type of situation reported as having the greatest effect are presented in Figure A for male Reservists and Figure B for female Reservists.

**Figure A. Male Reservists: Type of Situation Reported as Having Greatest Effect**



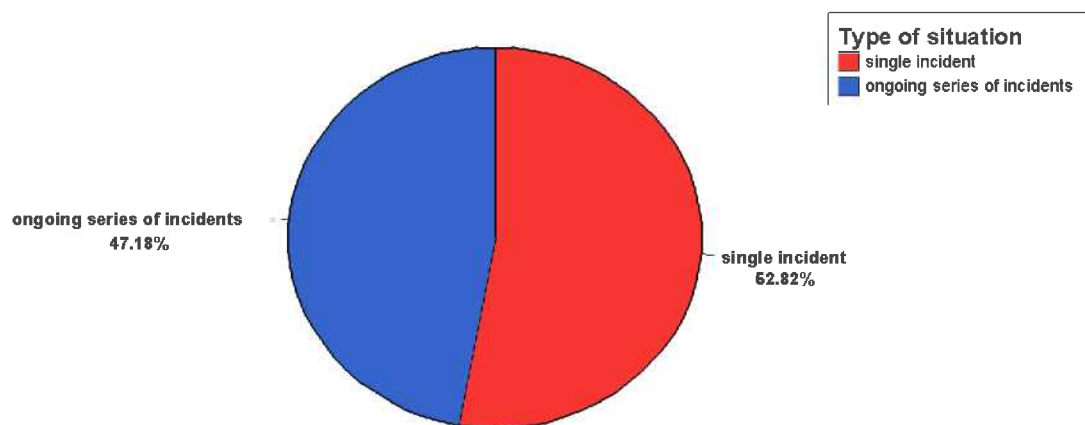
**Figure B. Female Reservists: Type of Situation Reported as Having Greatest Effect**



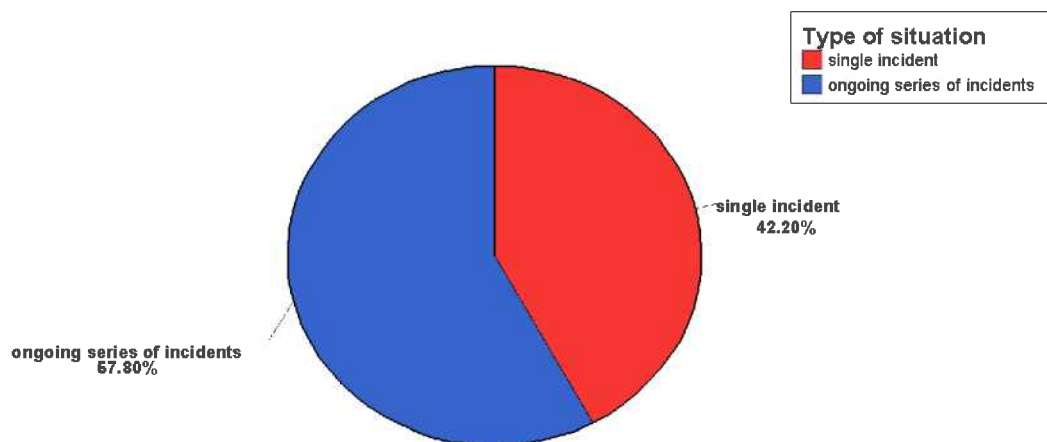
Was the situation a single incident or an ongoing series of incidents?

All respondents were asked if the situation that had the greatest effect on them was a single incident that happened once, or an ongoing series of incidents where the same person or people were involved over a period of days, weeks, or months. Of the male Reservists who endorsed unwanted sexual experiences, 52.82% reported the experience to be a single incident, while 47.18% reported the experience to be an ongoing series of incidents. Among the female Reservists, 42.20% reported the experience to be a single incident, while 57.80% reported the event to be an ongoing series of incidents. These responses are presented for male Reservists in Figure C and for female Reservists in Figure D.

**Figure C. Male Reservists: Single Incident vs. Ongoing Series of Incidents**



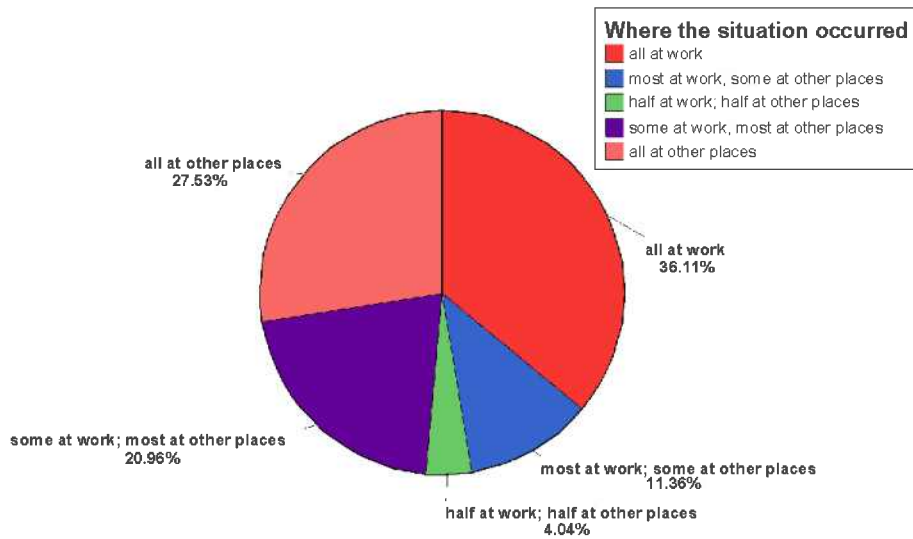
**Figure D. Female Reservists: Single Incident vs. Ongoing Series of Incidents**



Where and when did the unwanted sexual experiences occur?

When asked where and when the unwanted sexual experiences occurred, 47.47% of male Reservists indicated that the experiences occurred completely or mostly at the military worksite. Similarly, 46.33% of male Reservists indicated that these experiences occurred completely or mostly during duty hours. In contrast, female Reservists reported higher percentages of these numbers; 61.32% reported that these unwanted sexual experiences occurred completely or mostly at the military worksite and 61.85% reported that these experiences occurred completely or mostly during duty hours. The proportion of unwanted sexual experiences that occurred at the military worksite are presented in Figure E for male Reservists and Figure F for female Reservists. The proportion of these experiences that occurred during duty hours are presented in Figure G for male Reservists and Figure H for female Reservists.

**Figure E. Male Reservists: Proportion That Occurred at Military Worksite**



**Figure F. Female Reservists: Proportion That Occurred at Military Worksite**

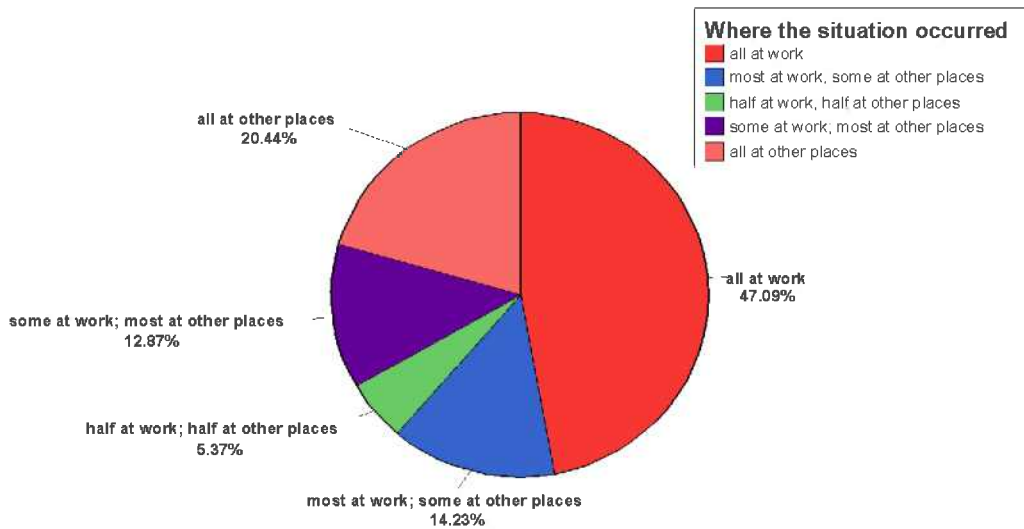




Figure G. Male Reservists: Proportion That Occurred During Duty Hours

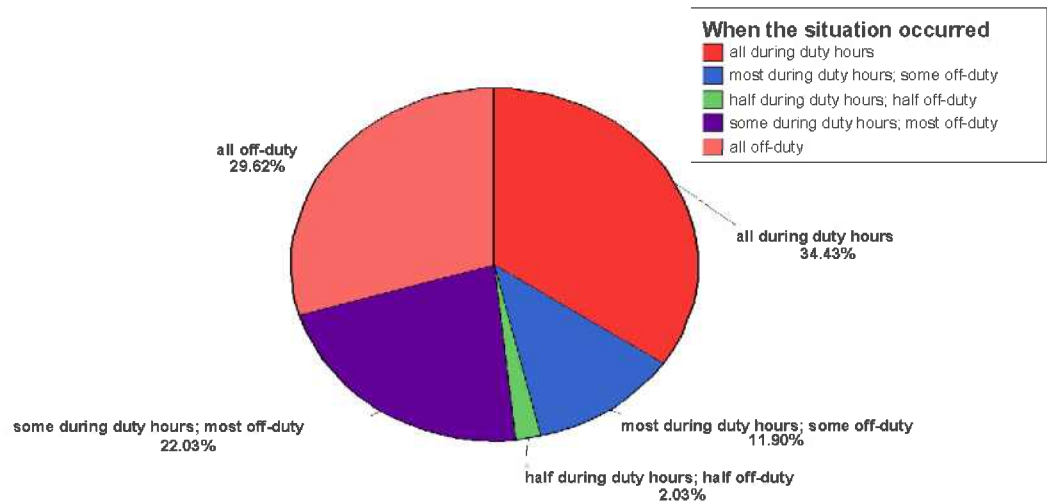
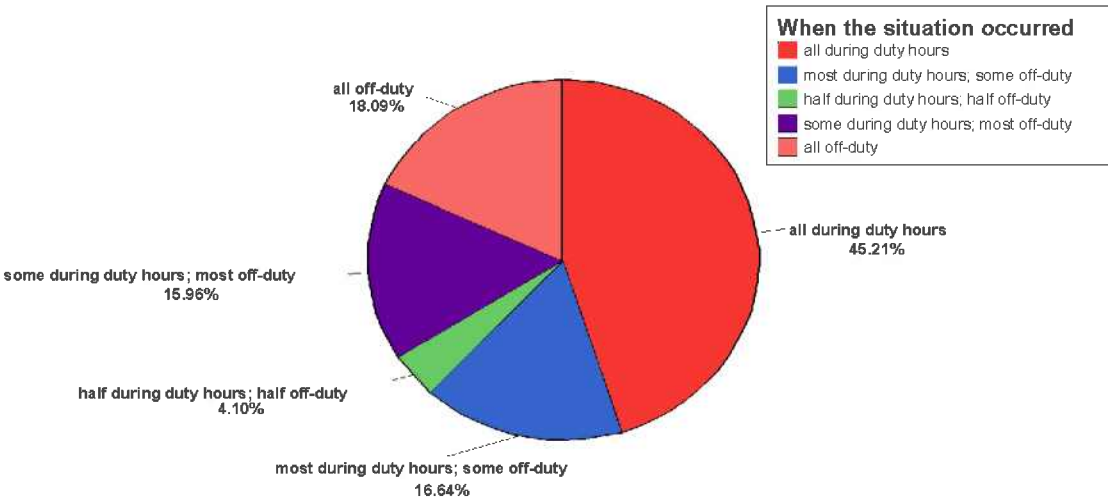


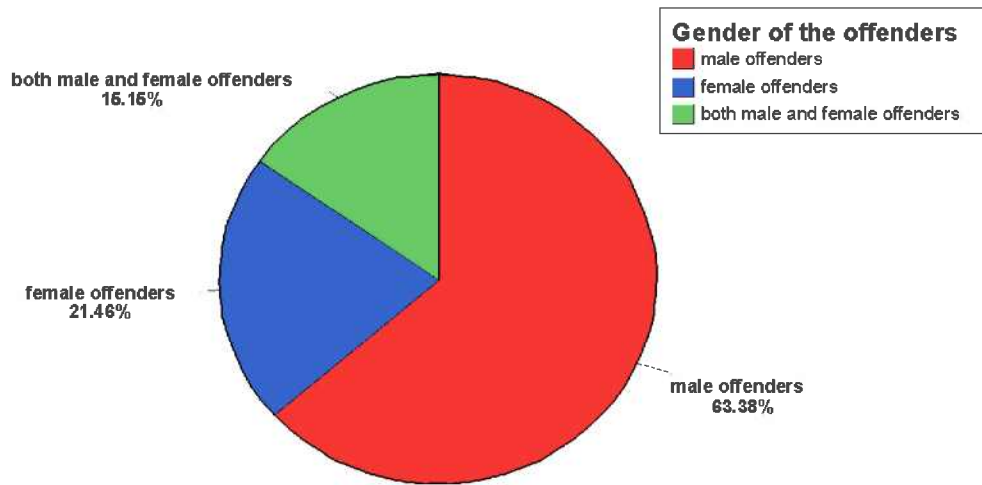
Figure H. Female Reservists: Proportion That Occurred During Duty Hours



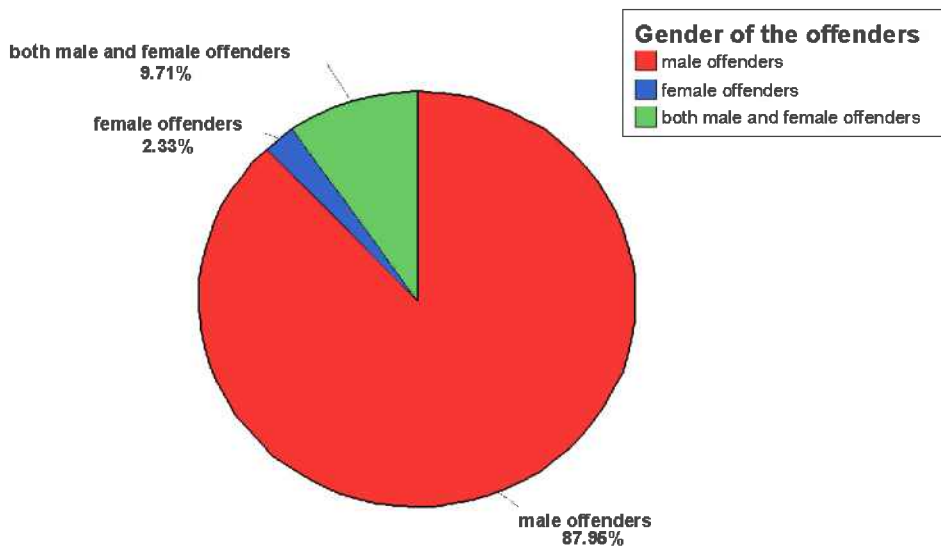
## Who were the offenders?

Both male and female Reservists reported the majority of the offenders involved in these unwanted sexual experiences to be men, with male Reservists indicating that 63.38% of their experiences involved male offenders while an additional 15.15% involved both male and female offenders. Female Reservists indicated that 87.95% of their experiences involved male offenders while an additional 9.71% involved both male and female offenders. Both male and female Reservists reported the majority of offenders to be known, as opposed to unknown, individuals, with 80.40% of male Reservists and 77.34% of female Reservists implicating know offenders. Additionally, 85.90% of male Reservists reported that their experiences involved only military offenders, while an additional 8.72% reported that their experiences involved both military and civilian offenders. Among female Reservists, 92.23% reported only military offenders, while an additional 5.23% reported both military and civilian offenders. Reports of the gender of offenders are presented in Figure I and Figure J for male and female Reservists, respectively. The relative frequencies of known vs. unknown offenders are presented in Figure K and Figure L for male and female Reservists, respectively. The relative frequencies of military vs. civilian offenders are presented in Figure M and Figure N for male and female Reservists, respectively.

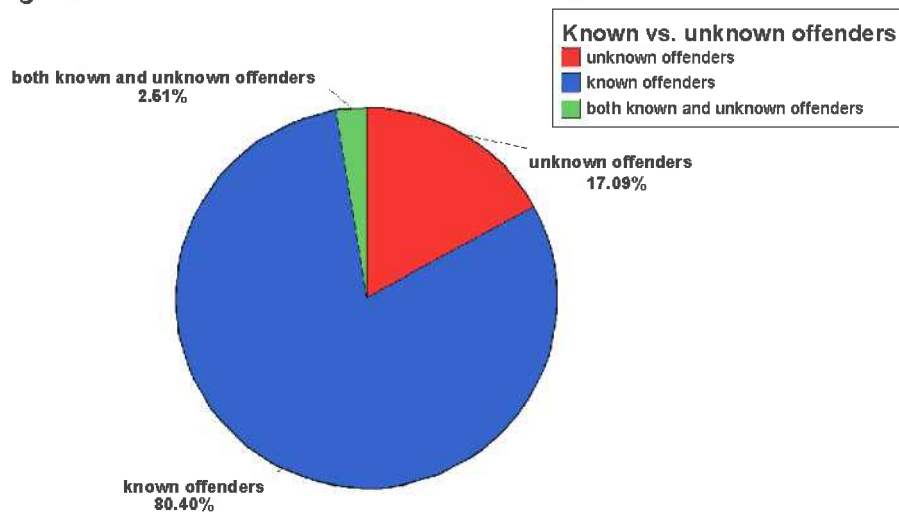
**Figure I. Male Reservists: Gender of the Offenders**



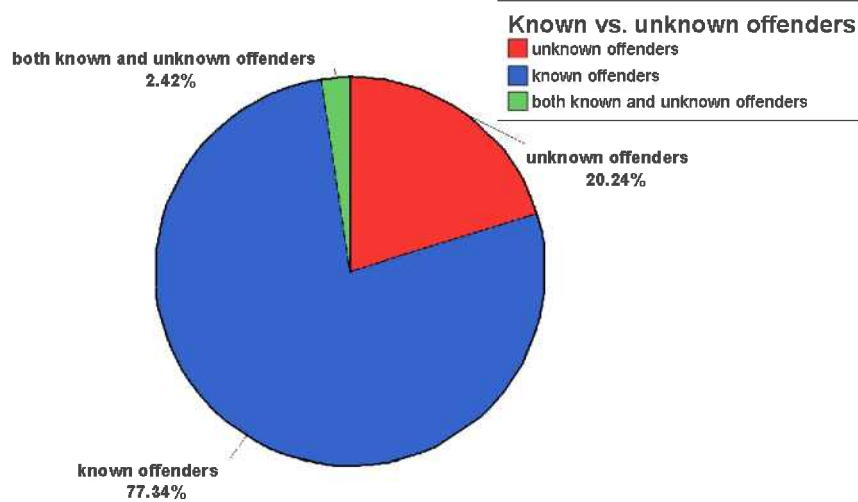
**Figure J. Female Reservists: Gender of the Offenders**



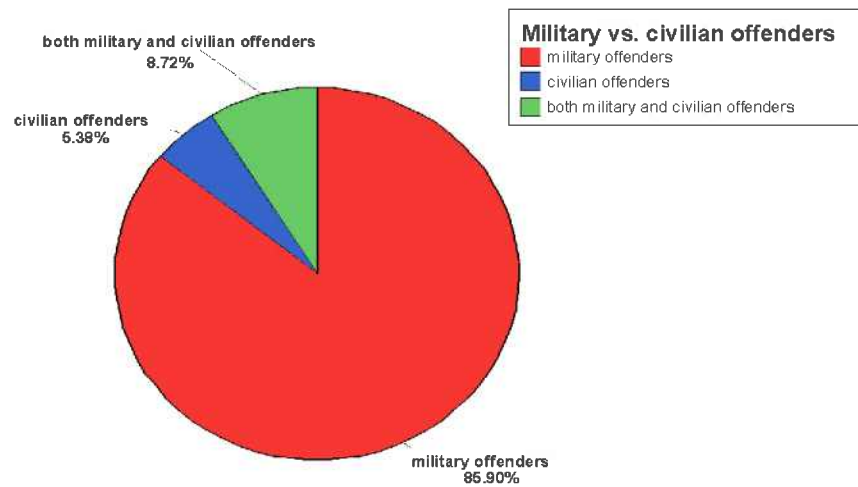
**Figure K. Male Reservists: Known vs. Unknown Offenders**



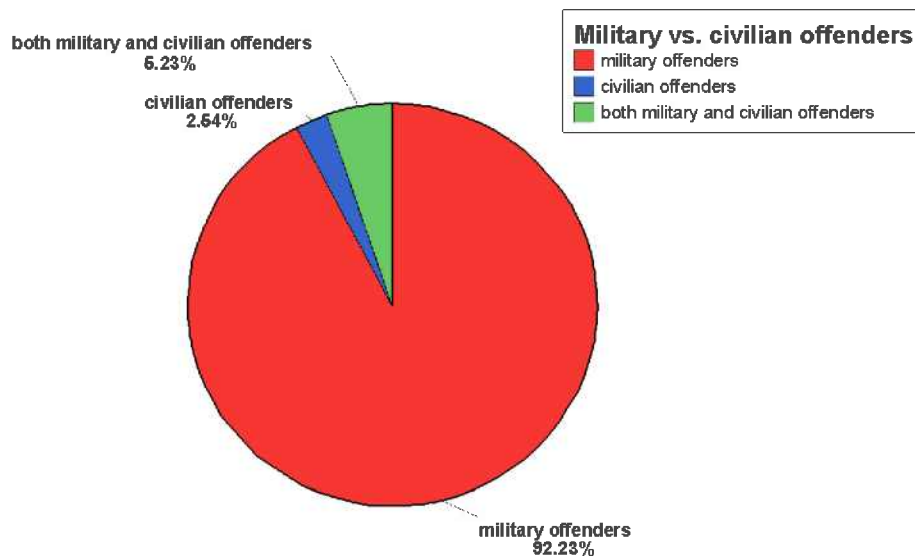
**Figure L. Female Reservists: Known vs. Unknown Offenders**



**Figure M. Male Reservists: Military vs. Civilian Offenders**



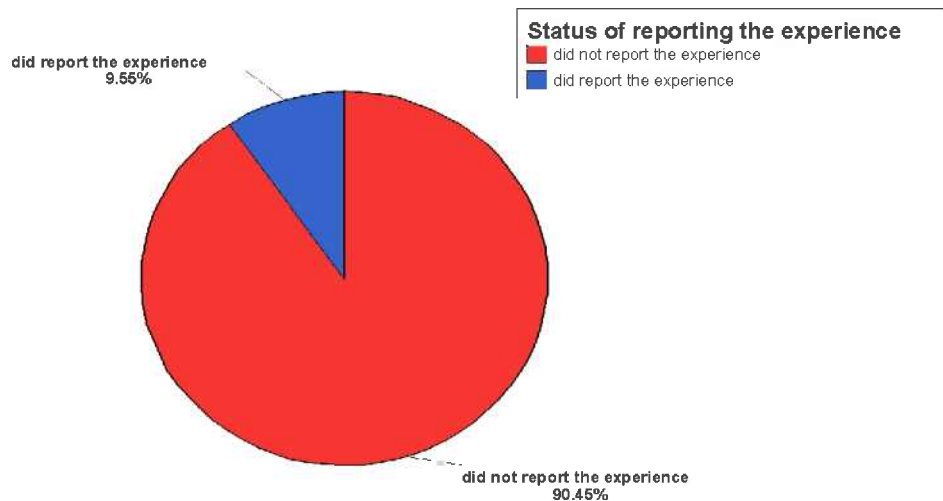
**Figure N. Female Reservists: Military vs. Civilian Offenders**



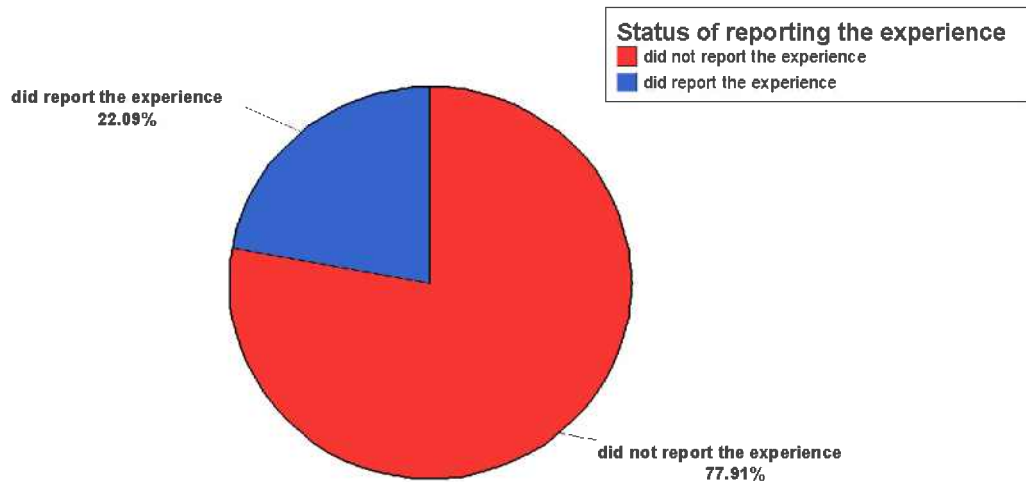
Did Reservists report their experiences through official channels and, if so, what was the response?

When asked, a significant number of Reservists who reported unwanted sexual experiences indicated that they did not report these experiences through official channels, with 90.45% of male Reservists and 77.91% of female Reservists endorsing this response. Among those Reservists who did report their experiences through official channels, about half of all male respondents (51.52%) and somewhat less than half of all female respondents (41.52%) reported that action was taken to correct the situation. Among this same group, 57.89% of male Reservists and 65.85% of female Reservists indicated that after reporting their experiences through official channels they were encouraged to drop the complaint. Figure O and Figure P present information on whether or not male and female Reservists reported their experiences. Figure Q and Figure R present information on whether or not male and female Reservists perceive that action was taken to correct the situation. Figure S and Figure T present information on whether or not male and female Reservists perceive that they were encouraged to drop the official complaint.

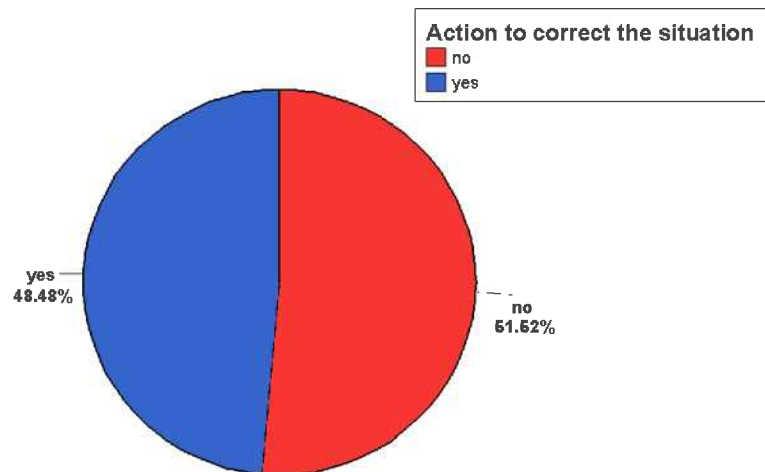
**Figure O. Male Reservists: Reported the Situation Through Official Channels**



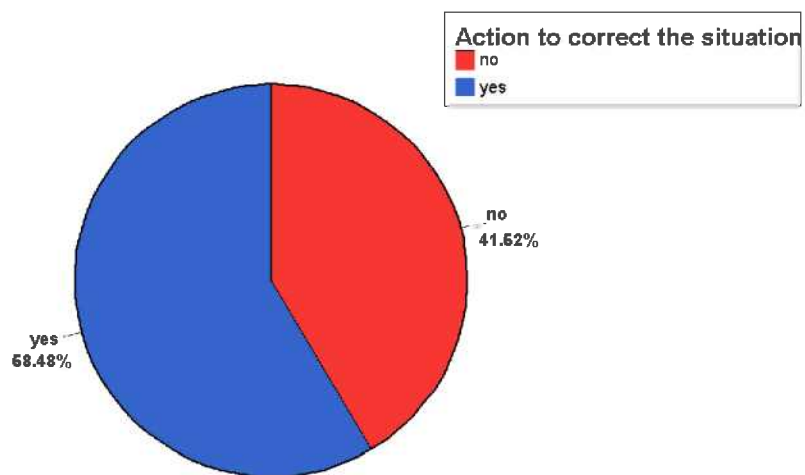
**Figure P. Female Reservists: Reported the Situation Through Official Channels**



**Figure Q. Male Reservists: Action Taken to Correct Situation**

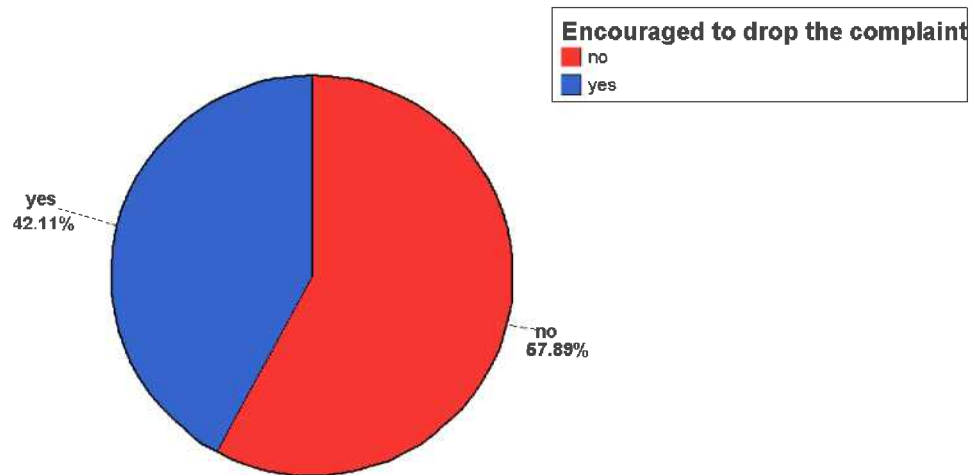


**Figure R. Female Reservists: Action Taken to Correct Situation**

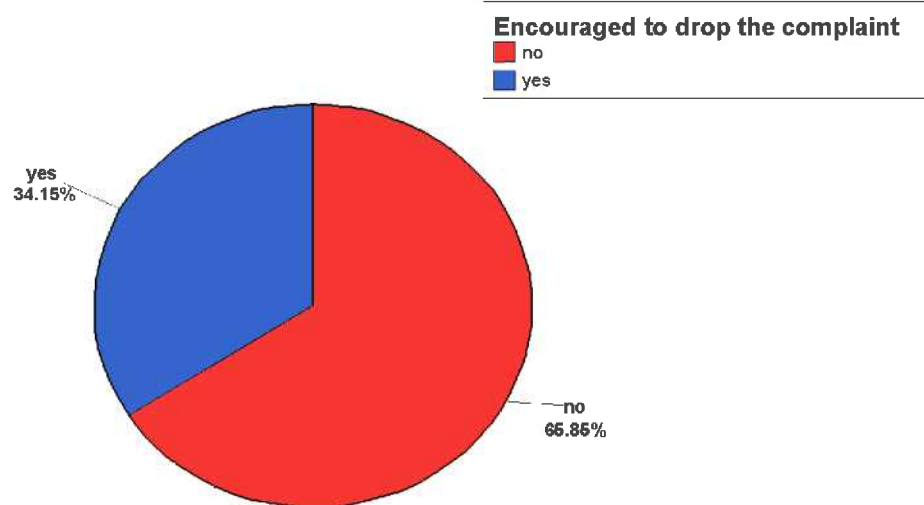




**Figure S. Male Reservists: Encouraged to Drop the Complaint**



**Figure T. Female Reservists: Encouraged to Drop the Complaint**



To what extent were Reservists who reported the experience satisfied with the complaint process?

When questioned, only 45.92% of male Reservists and 37.72% of female Reservists stated that, overall, they were either satisfied or very satisfied with the complaint process. Male Reservists' level of satisfaction with the complaint process is presented in Figure U. Female Reservists' level of satisfaction with the complaint process is presented in Figure V.

Figure U. Male Reservists: Satisfaction with Complaint Process

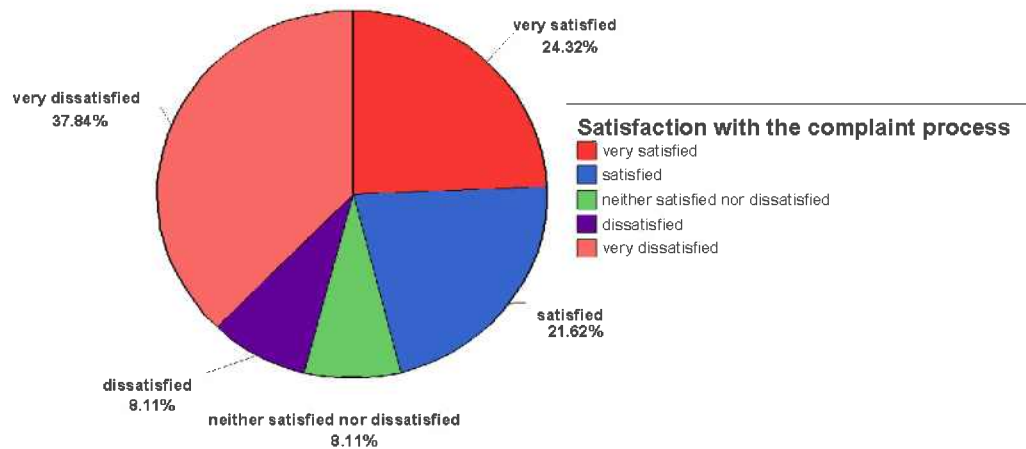
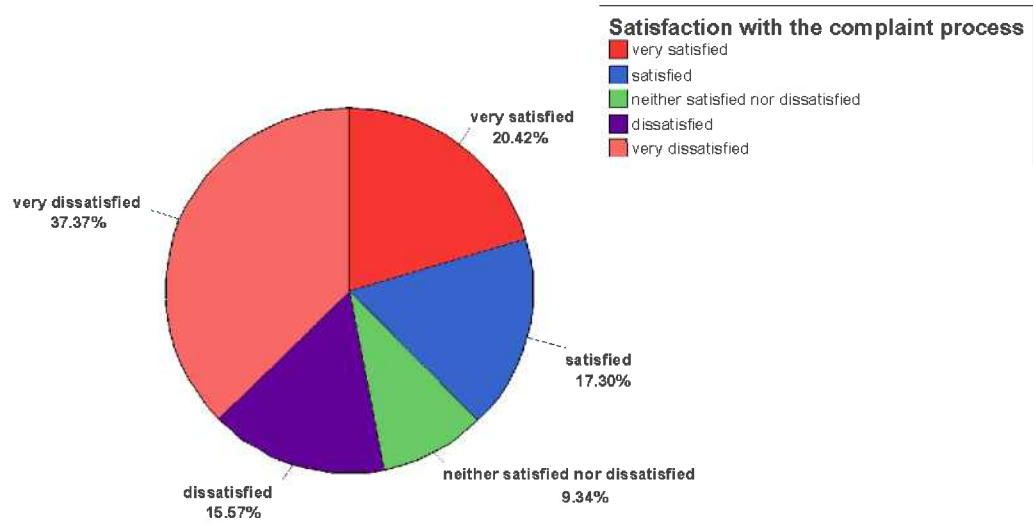


Figure V. Female Reservists: Satisfaction with Complaint Process



#### **D. Seeking Counseling for Military Sexual Trauma**

Former Reservists who reported unwanted sexual experiences during their military service were asked a series of questions about the health care they sought and/or received “within a few months of the situation,” “other than the first few months,” or “currently.” The types of care include emergency rooms, doctors, “medical care” more generally, a mental health provider or support group, and clergy. Table S summarizes the percentages reporting seeking help at different times following the MST. These reports have been grouped according to the timing of the Reservists’ help-seeking rather than the location or type of provider. Within each time period respondents who reported more than one type of help are counted only once.

Table S: Estimated Numbers of Reservists with Military Sexual Trauma Seeking Help for the Experience

<b>Help Seeking</b>	<b>Male</b>		<b>Female</b>		<b>Total</b>
	<b>Est. N*</b>	<b>Prevalence</b>	<b>Est. N*</b>	<b>Prevalence</b>	
Base = All with MST:	123,400	100%	63,700	100%	187,100
Within first months	3,950	3.2%	5,500	8.6%	9,450
Later	5,050	4.1%	6,700	10.5%	11,750
Currently	12,850	10.4%	12,050	18.9%	24,900
At any time	16,800	13.6%	17,650	27.7%	34,450
Unable to get help in last 3 months	2,200	1.8%	850	1.3%	3,050
Sought help from VA	1,350	1.1%	950	1.5%	2,300
Received help from VA	600	0.5%	400	0.6%	1,000
Base = All with Assault:	15,650	100%	24,500	100%	40,150
Within first months	1,100	6.9%	3,450	14.1%	4,550
Later	850	5.5%	5,000	20.4%	5,850
Currently	1,750	11.0%	5,000	20.5%	6,750
At any time	2,800	17.9%	9,100	37.1%	11,900

\*Estimated population frequencies have been rounded to nearest 50.

The patterns in these responses are that 1) women were more likely to seek health care services than were men, 2) both men and women experiencing sexual assault were more likely to seek care than were those experiencing any form of MST, and 3) both men and women were more likely to seek care as time passed, with the largest proportions getting care at the time of the survey. The fact that the majority of those receiving care for their MST at any time were doing so at the time of the survey also speaks to the continuation of symptoms from earlier events.

Small proportions (1.8% of men and 1.3% of women) had sought care in the three months prior to the survey and had been unable to obtain it. Of those Reservists with MST who reported they had tried to obtain care at any time from VA (1.1% of men and 1.5% of women), about half, or approximately 1,000 Reservists, said that they had received it.

## **E. Estimate of Resources Required to Meet Legal Mandate**

This study suggests that the potential workload and cost to the nation will be substantial for providing mental health care (or all MST-related care) to those former Reservists who experienced sexual trauma while in military service. Much depends on the timing of Reservists coming forward for MST-related services. Best estimates put the total amount at \$900 million (2003 dollars) over five to 10 years for Reservists who have already separated from the military, if benefits are limited to mental healthcare services. If this benefit is not limited to mental healthcare services, a best estimate is \$1.44 billion dollars (2003 dollars), over five to 10 years for those Reservists who have already separated from the military. The timing of these costs will depend on how quickly information about the availability of this benefit can be transmitted to former Reservists, how quickly eligible Reservists take advantage of these services, and how quickly VA can make staffing and facility adjustments to accommodate the new flow of patients. For Reservists who separate after a benefit is created, the estimated additional annual cost for each year's group of separating Reservists is about \$12 million, if benefits are limited to mental healthcare services, or about \$20 million, if they are not. Over 5 years, the mental health benefit for a single cohort separating in a single year is estimated to cost about \$50 million (2003 dollars). Thus the total cost of a mental health care benefit for Reservists with any MST is likely to approach \$1 billion (unadjusted for inflation) over its first 5 years.

### **1. Number of Reservists Likely to Seek Care**

#### **Annual Separations.**

The survey indicates that, among former Reservists, 60.0% of women and 27.2% of men have experienced some sexual trauma during their military service (see Table P). This means that the backlog of MST victims who would be potentially eligible for treatment under a new benefit would be almost 64,000 women and over 123,000 men. To estimate the flow of new Reserve/Guard separatees each year who have experienced MST, the study used the reports of respondents to this survey, about 90% of whom separated between 1988 and 1999. For that subgroup of respondents, the incidence rates differ by only about 0.1% on any prevalence measure from the rates provided above for the total Reservist population. For the most recent separatees, from 1995 through 2003 (with very small representation for 2000 or later), the rates differ somewhat more from those above. Among this group, the rate of MST for women is 59%; for men 28%. With these relatively small differences, estimates of costs for the yearly flow of new separatees will not differ substantially, whether one uses the rates based on all survey respondents or survey respondents who are recent separatees. As a result, the rates based on all survey respondents were used as indicators of prevalence of MST for determining both the new yearly flow of patients with MST and the potential backlog of Reservist personnel who have already separated from their military component. These rates mean that about 3,000 women and 7,350 men who have experienced at least some military sexual trauma are separating from Reserve service each year.

#### Potential Backlog.

How many Reservists who experienced MST are likely to ask for care related to their MST? Following the methods outlined above, from the approximately 560,000 former Reservists at the time of the survey, the estimated number of Reservists who are likely to seek care in the future is 33,950 (Table T). Respondents to the survey report that only about 75% of them would seek this care from VA if it were offered. Applying this percentage to the 33,950 suggests that approximately 25,000 former Reservists would likely turn to VA for help with MST over the next few years.

Table T. Estimated Number of Former Reservists Likely to Seek Military Sexual Trauma-Related Care

	<b>Male</b>		<b>Female</b>		<b>Total</b>
	<b>Est. N*</b>	<b>Prevalence</b>	<b>Est. N*</b>	<b>Prevalence</b>	
Total Number Experiencing MST	123,400	100%	63,700	100%	187,100
A. Number of Reservists Seeking Care at Any Time	16,800	13.6	17,650	27.7	34,450
B. One-third with Ongoing Symptoms	5,550	4.5	5,850	9.2	11,400
C. Sought Help but Couldn't Get it	2,200	1.8	850	1.3	3,050
D. Number Who Have not Yet Sought Help [Total – (A + C)]	104,400		45,200		149,600
E. % of D likely to Seek Help (% Getting Later Help*D)	10,850	10.4	8,650	19.1	19,500
<b>Estimate of Number likely to Seek Care B+C+E</b>	<b>18,600</b>	<b>15.1</b>	<b>15,350</b>	<b>24.1</b>	<b>33,950</b>

\*Estimated frequencies have been rounded to nearest 50.



#### Explanation of Calculations in Table T.

From the survey numbers, the estimate of the number of Reservists likely to seek MST-related care from this backlog of personnel who experienced MST was calculated as the percentage of all Reservists experiencing any level of MST times an estimate of the proportion that might ever seek care if it were available. The latter was calculated separately for male and female victims and equaled the sum of the following three groups.

1) Of victims who received help in the months immediately following the worst incident of MST or later, about one-third will have long-term persistence of PTSD symptoms or other serious mental health problems. Altogether, about 16,800 men (13.6%) and 17,650 women (27.7%) had obtained some help for MST by the time of the survey. These Reservists are indicated in Line A of Table T. Thus, approximately 5,550 men and 5,850 women have had some treatment and will require relatively long-term care that may lead them to seek services from VA (or another authorized provider) under any new benefit.

2) The victims (exclusive of those in group 1 above) who at some point sought medical or psychiatric help but reported that they were unable to obtain it. For this second group, who would be likely to seek services through VA under a new benefit, the estimates rely on the rate of less than 2% of both men and women who experienced MST and who also indicated that in the three months preceding the survey they sought medical care (physical or mental) but were unable to obtain it, either because they could not afford it or for some other reason. This group consists of approximately 2,200 men and 850 women, shown in Line C of Table T.

3) A proportion of the remaining victims who had not received any help related to MST at the time of the survey but who are expected to eventually seek help. This group may seek help from VA under a new benefit. These people who have not yet received any treatment are indicated in Line D of Table T. Survey results suggest that about 10.4% of male Reservists and 19.1% of female Reservists did not seek treatment within three months of their worst MST incident but did seek treatment at a later point prior to the survey. This rate provides the best estimate of the additional Reservists who will eventually seek help under a new benefit. This amounts to about 10,850 men and 8,650 women, shown in Line E of Table T.

The sum of these three estimates represents the estimated potential backlog in the number of Reservists who have experienced MST and are likely to seek treatment under a new benefit: 18,600 men and 15,350 women. If 75% of this group would seek treatment through VA, the total is about 25,000. This is a considerable volume of potential new patients and is larger than our estimates of the number of patients VA currently treats for MST in a year. The need to treat that many patients, possibly on relatively short notice, would require considerable logistic effort by VA to have adequate staff to handle the flow of patients and to allocate that flow efficiently.

#### Sensitivity Analysis.

If a benefit were limited to personnel who experienced sexual assault, as opposed to any level of military sexual trauma, which includes experiences of sexual harassment, the percentage of victims identified by the survey who would be likely to seek help under a new benefit would be 17.0% of men and 28.9% of women, higher than the 15.1% and 24.1% shown in Table T for all MST victims. However, those rates would apply to a smaller base of Reservists, as the survey indicates that about 24,450 women and 15,750 men reported experiencing some form of sexual assault during their military service. The number who would likely seek help under a new benefit would be about 2,700 men and 7,050 women. If 75% of these patients sought help from VA under a new benefit, about 7,300 new patients would come to VA.

## 2. Estimate of VA Resources Needed to Handle Annual Flow of New Separates

Each year, a new cohort of Reserve personnel separates from Reserve service. Even if benefits were limited to those who separate after some recent date, the number who would require or seek care for MST would be large. The survey suggests that, from 1988 to 1998, about 5,000 women and between 27,000 and 44,000 men (between 6% and 10% of those identified by DMDC) become former Reservists each year. Given the incidence of MST identified from the survey, about 3,000 women and 7,350 men each year would be potential MST patients. Of this flow of Reservists, 15.1% of men and 24.1 of women who experience MST would be expected to eventually seek treatment. These rates correspond to about 1,100 men and 750 women from each year's group of Reserve separates.

The actual rate may differ from those figures. Recent events that have led to large numbers of Reserve personnel being called to active duty may mean that many former Reservists may now be eligible for MST care from VA even without a new benefit being enacted because their active military duty qualifies them as veterans. However, any effect from recent events is very difficult to project at this point. Therefore, the projections of resource needs that follow are based on the recent patterns of Reserve separations, as indicated in the survey.

Even though the discussion of costs invokes time frames of up to 5 or 10 years, no inflation adjustments are incorporated in these cost estimates. The exact timing of any expenditure is impossible to forecast accurately, because it is not known how quickly Reservists will come for treatment. Estimates are given in 2003 equivalent dollars. Due to the passage of time, actual costs will be higher than those presented here.

### Cost Estimates for Annual Flow: First Fiscal Year.

If the mean costs for former Reservists treated for MST were the same as for current VA MST patients, the cost of mental health services alone would be about \$12 million yearly (\$3,875 for each woman and \$8,300 for each man). These costs are summarized in Table U.

Table U. Estimated Mental Health Care Costs of VA Treatment of Annual Flow of Reservists Who Have Experienced Military Sexual Trauma

		<u>Severity of MST</u>	
		<u>Any</u>	<u>Sexual</u>
		<u>MST</u>	<u>Assault</u>
<u>Source of</u>	<u>Time</u>	<u>Estimated Costs</u>	
<u>Demand</u>	<u>Frame</u>	<u>(Millions of \$)</u>	
<b>Backlog</b>	<b>1 year</b>	225	45
	<b>5 years</b>	900	180
<b>Annual</b>	<b>1 year</b>	12	3
	<b>5 years</b>	50	10

If only those patients experiencing some form of sexual assault were allowed access to VA, the annual cost would be \$3 million. The average costs for those with more severe MST are obtained by assuming that all current VA MST patients have the same incidence of more severe MST as do those people in the survey who have some MST and will seek treatment. (This provides the best estimate given that we cannot reliably identify VA patients who experienced sexual assault as opposed to other forms of MST.) For example, average cost for a sexual assault patient is taken

by averaging cost only for the most costly 38% (women's rate) of VA FY2000 MST patients. This approach may overstate the average cost for patients who experience sexual assault, because VA MST patients, as a group, have probably had more severe trauma than the respondents in the survey.

#### Costs for Five Years for a Single Year's Separatees.

First year costs are not the full costs of treatment for these patients. By FY2002, 67% of those VA patients being treated for MST in FY2000 still had some VA outpatient mental health treatment; 80% still had some form of VA treatment. If a new benefit is limited to mental healthcare only, the single year cost is estimated to be \$12 million; the five year cost, \$50 million. If the benefit were limited to those Reservists who experienced only sexual assault, the five-year estimated cost is \$10 million (2003 dollars).

#### Sensitivity Analysis Using Total Costs.

As a sensitivity analysis, costs for all VA healthcare provided to all patients with MST and women with PTSD were calculated and used to estimate total resources required. This estimate provides an upper bound on the needs of Reservists with MST. For VA patients treated for MST in FY2000, the mean total cost per patient was \$7,233 for women and \$13,179 for men in FY2000. In FY2001, that mean cost fell only by about 10%. Based on the experience of the FY2000 VA patients, it would appear that the annual total cost of treating the entire cohort of one-year newly separated Reservist personnel would fall from \$20 million to about \$12.7 million by the fifth year after separation. The 5-year sum of costs is shown in Table V as \$80 million.

Table V. Estimated Total Health Care Costs of VA Treatment of Annual Flow of Reservists Who Have Experienced Military Sexual Trauma

		<u>Severity of MST</u>	
		<u>Any MST</u>	<u>Sexual Assault</u>
<u>Source of Demand</u>	<u>Time Frame</u>	<u>Estimated Costs (Millions of \$)</u>	
<b>Backlog</b>	<b>1 year</b>	370	89
	<b>5 years</b>	1,440	300
<b>Annual Separations</b>	<b>1 year</b>	20	5
	<b>5 years</b>	80	17

#### Eventual Even Flow of Annual Costs Related to New Separatees.

These annual costs begin to accumulate as second, third, and subsequent years' "classes" of new separatees accumulate. That is, separatees in FY2003 would cost about \$12 million in their first year of coming for mental health treatment at VA (assuming normal flows of new patients starting and established, or "cured", patients leaving). If that first year were 2005, then in 2006 VA would have both the second year cost of the FY2003 separatees and the first year \$12 million cost of the FY2004 separatees (a total of nearly \$24 million). In FY 2007, the cost would be the third year of FY2003 (less than \$12 million), the second year of FY2004 (nearly \$12 million) and the first year of FY2005 separatees (just over \$12 million). The annual cost in FY2007 for all new separatees would amount to just less than \$36 million. That pattern of accumulation would continue until there is finally a large drop in treatment for the FY2003 separating cohort, with corresponding reductions in subsequent years coming for cohorts of separatees from later years.

Eventually, a continuing level of annual costs would be reached, with the drop in costs from departing patients offsetting the costs of new patients. If 5 years is the average treatment duration

for a class of new separatees, the equilibrium will be reached with continuing annual costs of about \$60 million (= 5 x 12). However, as noted in the Methods section, for about one-third of patients who experience PTSD, symptoms persist for many years. Therefore, a five-year average treatment duration is used here merely for illustrative purposes. The actual average may, in fact, be much longer (and costs correspondingly much higher) because of the one-third of patients who experience trauma-related symptoms that last many years.

### 3. Estimate of VA Resources Needed to Handle Potential Backlog

The cost estimates above were for about 1,900 patients. The potential backlog of demand suggests that as many as 33,000 patients may seek care, or 17 times the volume of new beneficiaries from single year separations. That is, the estimate for a single year's mental healthcare costs for that backlog of patients is roughly 17 times \$12 million, or approximately \$225 million. Costs of treating that volume of patients over five years are approximately \$900 million (Table U). Corresponding cost figures for Reservists experiencing sexual assault are considerably less because of the smaller numbers of past Reservists who report such experiences.

Total healthcare costs for former Reservists with either any MST or sexual assault are also presented in Table W. These costs are about 50% more than the costs for mental health treatment alone. For the first year, they are \$370 million for Reservists with any MST experience; over 5 years, these costs could be \$1.4 billion.

Table W. Estimated Health Care Costs of VA Treatment of Backlog of Reservists Who Have Experienced Military Sexual Trauma

MST-Related Care:	Time Frame	Severity of MST	
		Any MST	Sexual Assault
		Estimated Costs (Millions of \$)	
<b>Mental Health</b>	1 year	225	45
	5 years	900	180
<b>Total</b>	1 year	370	89
	5 years	1,440	300

The total cost of a mental health benefit for Reservists likely to come to VA over the first five years of a benefit for MST is thus almost \$1 billion in constant dollars -- \$900 million for the backlog of past separatees and more than another \$50 million for those who separate during that time.

### 4. Estimate of Resources Needed If Care is Given By Non-VA Providers

No geographic analysis was undertaken to see whether the locations of discharged Reservists match those of VA medical centers. It is possible that VA might need to contract for some MST treatment for Reservists who are located far from a VA facility. For this reason and as a sensitivity analysis, non-VA resources for this benefit were also estimated.

These estimates of cost for treatment from non-VA sources rely on the following assumptions:

- 1) Utilization will be the same as for the estimates of treatment from VA sources. That is, the same number of patients, the same frequency of inpatient use (as identified by DRGs), and the same frequency of outpatient use (as identified by CPT codes) are assumed.
- 2) Inpatient care would be reimbursed under Medicare fee schedules for FY2003. Specifically, the DRG weights used are those provided by CMS in the relative weight file posted on its website. Conversion factors (labor and non-labor) are taken from the Federal Register, (Vol. 68, No. 148), Friday, August 1, 2003. Because we cannot estimate the geographic distribution of demand for services, the estimates of cost use the conversion factors for large urban areas. Factors for other areas are about 8% lower. This assumption will overestimate potential costs if this form of the benefit were restricted to Reservists living in more rural and smaller urban areas.
- 3) Costs for outpatient services are based on VA tables of reasonable charges (what VA charges third party payers for care provided to VA patients with insurance). These amounts were discounted to estimate Medicare reimbursement rates that would parallel the rates for inpatient care. As with inpatient care, the amounts selected are the national base amounts; no geographic adjustments have been applied. Essentially, the discount ratios estimate the relationship between VA reasonable charges and Medicare physician fee schedule rates for those CPT codes that have both a VA reasonable charge and a Medicare allowed charge specified.

Additional adjustments were necessary to derive the complete estimates. Details of those adjustments are given in Appendix C.

Because 36.3% of all occurrences of CPT codes and 18.7% of occurrences for mental health care were not priced in the Medicare fee schedule, amounts for purchasing outpatient services from non-VA providers were estimated from the schedule of reasonable charges that VA establishes to determine how much to charge patients who can pay for their care for treatment of non-service-connected conditions. Version 1.2 of the reasonable charges were used, as those were in effect around FY2000 and therefore parallel the HERC VA cost estimates. Estimates were raised by 13.6%, the accumulated rate of inflation in medical care services between CY2000 and CY2003.

VA reasonable charges are typically higher than charges that the Medicare program pays private sector providers for the same services. Consequently, VA reasonable charges were reduced by a common multiple to more nearly reflect Medicare charges. For CPT codes that were priced under both Medicare's fee schedule and the VA's schedule of reasonable charges, the Medicare charges were, on average (weighted by the frequency of use of each CPT code by VA MST patients in FY2000), either 42% or 47% of the VA reasonable charges. The first figure assumes that all services are provided in facility settings; the second assumes all are provided in non-facility settings. Medicare specifies different allowed charges for the two settings. For services provided for mental health care, the ratios were higher: 55% or 60%, indicating that for those services the Medicare rates were closer to VA reasonable charges than for all outpatient services. With these considerations, there are two scaling factors that could be applied to the estimated reasonable charges to give estimates of the outpatient cost of purchasing care from non-VA providers. The full amount of reasonable charges could be multiplied by .42 to scale to Medicare's facility-based charges, or by 0.47 to scale to Medicare's non-facility charges. Calculating average costs for those patients gives results in Table X. The inpatient averages are also shown.

Table X. Estimated Annual Average Non-VA Costs Per Patient Receiving VA Military Sexual Trauma Treatment in FY2000

<b>Basis For Estimate</b>	<b>Mental Health</b>	<b>Other</b>	<b>Total</b>
	<b>Estimated Amounts (\$)</b>		
Reasonable charges, adjusted to Medicare – Facility charge	2,409	1,825	4,234
Reasonable charges, adjusted to Medicare – Non-facility charge	2,621	2,149	4,770
Inpatient Medicare rates	996	771	1,767

Cost Projections For Non-VA Providers.

Table Y shows three estimates of costs for purchasing services for a single fiscal year for one year's flow of Reservist separatees. Two are estimates for non-VA providers; estimates of VA costs from Tables U and V are repeated for convenience in comparison. The two non-VA estimates are not fully realistic, as they assume that VA can purchase these services at rates that are equivalent to Medicare rates.

Note that the cost estimates in Table Y cannot be derived as a simple multiple of the average costs shown above and the number of Reservists expected to seek treatment from a single year's new separations. Figures in the tables above are averaged across both men and women. The non-VA figures in Table Y incorporate differences in cost between men and women, exactly as the VA estimates did.

Table Y. Comparison of Projected Costs Using VA Providers With Two Measures of Costs of Non-VA Providers

<b>Cost Measure</b>	<b>Mental Health Care Only</b>	<b>All Health Care</b>
	<b>Estimated Costs (Millions of \$)</b>	
<b>VA Average Costs</b>	12	20
<b>Non-VA: Reasonable Charges Deflated to Medicare Facility Charges</b>	10	16
<b>Non-VA: Reasonable Charges Deflated to Medicare Non-Facility Charges</b>	10	17

\*Single fiscal year cost for annual flow of Reservist Separatees

Two important patterns are shown in Table Y. First, estimated costs for non-VA providers are lower than for VA when outpatient reasonable charges are deflated to Medicare facility or non-facility charges. Second, when non-VA charges are deflated to facility or non-facility Medicare charges, the costs for mental health services only are a higher proportion of total estimated costs than for VA average costs. This last relationship indicates that non-VA inpatient costs have a

higher proportion of mental health service for these patients than do non-VA outpatient costs. These patterns reflect relative Medicare rates for recent years and may not apply in future, if its reimbursement schedule changes.

Table Y shows costs for one year for one year's Reservist separatees. As with VA costs, the true total cost of care for these MST patients is more accurately indicated by using at least a 5-year time frame. Also, one needs to be aware of the cost of treating the backlog of Reservists who have experienced MST. In the same format as above for VA costs, Table Z shows those figures for the adjusted reasonable charges version of non-VA cost projections.

Table Z. Estimated Costs of Treatment by Non-VA Providers of Former Reservists Who Experienced Military Sexual Trauma\*

Source of Demand	Severity of MST	All MST	
	Extent of Care	All Care	Mental Health
	Time Frame	Estimated Costs (Millions of \$)	
<b>Backlog</b>	1 year	307	188
	5 years	1,201	752
<b>Annual Separations</b>	1 year	17	10
	5 years	67	41

\*Non-VA Costs Estimated at Medicare Charges

#### Costs If Combining Some VA Services and Some Non-VA Services.

The survey results indicate that only about 75% of reservists would seek treatment related to their MST from VA providers. If a new benefit for Reservists who experienced MST does not require that all who seek care under that new benefit receive care only from VA staff, then at least 25% of those who seek some help under the new benefit will not seek care from VA. In addition, more Reservists would presumably seek care, raising the total cost of the benefit because of the increase in the population availing themselves of the benefit. Under those circumstances, the total cost of the new benefit will be neither the VA nor the non-VA estimate. Instead, the estimated cost would be a weighted combination of VA costs and non-VA costs. For a single fiscal year, the estimated cost for one year's annual flow of new Reservist separatees would look as below in Table AA. Using the adjusted reasonable charges estimate of non-VA costs, the figures on the last line of the table incorporate the assumption that 75% of MST patients who seek care will come to VA; the other 25% would go to non-VA sources. The total number seeking care is also assumed to increase by a third (25/75).

Table AA. Estimated Annual Cost Combining VA and Non-VA Providers \*

Cost Measure	All Health Care	Mental Health Care Only
	Estimated Costs (Millions of \$)	
VA Average Costs for 75% of those likely to seek care	20	12
Combination: 75% VA and 25% Non-VA for 100% of those likely to seek care	27	16

### 5. Projections Do Not Estimate Costs of Implementation

All of the cost projections given above are for delivering services as part of the normal flow of operations in VA or non-VA settings. The projections assume, in effect, that adequate physical facilities, machines and equipment and medical delivery systems are in place and operating. The projections do not include any estimates for establishing substantial new facilities, getting them up and running, hiring new staff and directing patients to them for services. The projections do not include any allowances for transporting patients who may need such services to obtain access to medical care (beyond the extent to which that happens already for VA MST patients). The projections have assumed, in effect, that the patients live where the facilities and services are that will be made available to them. That is, the projections assume that a new Reservist population will, on average, be at least as close to VA facilities as most VA MST patients were in FY 2000 and are able to obtain services from VA without any more steps taken to assure access than are taken for today's VA MST patients.

## V. Discussion

### A. Prevalence Rates of Military Sexual Trauma

Results of this investigation indicate that across all Reserve Components, the estimated prevalence of any military sexual trauma, including experiences of sexual harassment and sexual assault, is 27.2 % among male Reservists and 60.0 % among female Reservists. The estimated prevalence of military sexual assault (i.e., experiences of unwanted sexual touching, including rape) among males is 3.5%; among females the estimated prevalence is 23.3%. The estimated prevalence of military sexual trauma experienced by Reservists specifically while on Active Duty for Training Status was somewhat lower than the more general rates, with a prevalence of 16.4% among male Reservists and 49.2% among female Reservists. It is not simple to compare these prevalence rates with those identified in large-scale investigations of military sexual trauma among active duty forces, due to differences in the time period covered by the investigation ("within the last year" for the DoD's *Sexual Harassment Survey (1995)* as compared to "at any point during Reserves service" in this investigation) and differences in possible exposure (active duty military typically involves full-time service while Reservists who have not been activated typically serve only one weekend a month and two weeks a year). Nonetheless, taking into account these differences, the prevalence rates identified among Reservists in this investigation appear somewhat consistent with the rates identified among active duty forces in the DoD investigation, which reported an annual incidence of military sexual harassment of 38% among men and 78% among women.



Not surprisingly, as compared to male Reservists, female Reservists reported higher rates of military sexual trauma, generally (60% for females as compared to 27.2% for males), and sexual assault, specifically (23.3% for females as compared to 3.5% for males). However, given the greater absolute number of males who have served in the Reserves, population estimates of the number of male Reservists who experienced some form of unwanted sexual attention are greater than the number of female Reservists who experienced some form of unwanted sexual attention (approximately 123,400 males as compared to 63,698 females). The same does not hold true for sexual assault (approximately 15,635 males as compared to 24,498 females).

When estimated prevalence rates of military sexual trauma are stratified by specific component, among males the estimated prevalence ranges from 21.3% for Air Force Guard to 28.7% for both Air National Guard and Marine Corps Reserve. Among females, the estimated population prevalence ranges from 57.1% for Navy Reserve to 75.0 % for Marine Corps Reserve. It is interesting to compare these rates with the findings reported in the *Department of Defense's Sexual Harassment Survey (1995)* of active duty forces. In contrast to the findings from this investigation, among active duty forces, rates of unwanted, uninvited sexual attention for males were generally consistent across the Army, Navy, Air Force, Marine Corps and Coast Guard. However, consistent with the findings from this investigation, rates of unwanted, uninvited sexual attention for females were highest in the Marine Corps.

A series of follow-up questions answered by Reservists about the incident that had "the greatest effect" on them revealed that over half of these unwanted sexual experiences occurred at a military worksite and during duty hours. For both male and female Reservists, the majority of the offenders were male. In addition, the majority of these experiences involved offenders who were military personnel and who were known to the victims. The majority of Reservists did not report their military sexual trauma experiences through official channels. Of those Reservists who did report their experiences, about half of the male Reservists and slightly over half of the female Reservists indicated that some action was taken to correct the situation. Just under half of male Reservists and just over a third of female Reservists indicated that, overall, they were satisfied or very satisfied with the complaint process.

Earlier investigations by DoD and VA staff have confirmed that military sexual trauma represents a significant problem among members of the active duty forces. Previous Congressional Reports have outlined the development and implementation of sexual trauma treatment programs by VA as well as collaborative efforts by VA and DoD to ensure for the provision of treatment for military sexual trauma among veterans. The results of this investigation indicate that, despite part time service, experiences of sexual harassment and sexual assault during military service are also a significant problem among former members of the Reserve Components of the Armed Forces.

## **B. Resources Required to Meet Counseling Needs**

The cost estimates of resources required to meet the counseling needs of Reservists who have experienced military sexual trauma arise from two possible sources of patients. One source of patients comprises those individuals who experienced military sexual trauma and have already separated from the Reserves. The estimated initial VA cost of providing mental healthcare to this group is \$225 million. A second potential source of patients is each year's new group of individuals separating from Reserves service who have experienced military sexual trauma and may seek mental healthcare. The estimated VA annual cost of providing care to this group is \$12 million. However, because trauma-related psychological symptoms associated with the more severe forms of MST often last for more than three years for at least a third of victims, the long term treatment that may be necessary for these patients could cost \$900 million for the backlog of former Reservists and \$50 million for each new year of separatees.

Estimates of costs are sensitive to specific provisions of any benefit. The estimates provided above assume that Reservists would be eligible only for mental healthcare from VA. If, instead, the

provision of benefits were expanded to include all healthcare, annual costs would be \$370 million for treating the backlog of former Reservists and \$20 million for new separatees. Similarly, if only Reservists who experienced sexual assault, as opposed to any form of military sexual trauma, were eligible for care, annual costs would be \$45 million (for the backlog of former Reservists) and \$3 million (for new separatees) if care were restricted to mental health services, or \$89 million and \$5 million, for all healthcare services.

It is likely that some services would have to be performed by non-VA providers, even if the basic benefit authorizes primarily VA provision of services. This survey suggests that as many as one-quarter of all former Reservists who experienced military sexual trauma might not come to VA even if services were available there. Estimates indicate that the cost of obtaining mental health services from non-VA providers would be approximately the same as the cost of obtaining mental health services from VA providers. These estimates assume that the services could be obtained from private sector providers at rates similar to those of the Medicare program, which covers care primarily for elderly patients.

VA has been responsive to the problem of sexual trauma among active duty veterans, establishing a set of comprehensive programs for the treatment of military sexual trauma. However these programs will need to expand to meet the needs of former Reservists if eligibility benefits are changed to apply to this group. The potential MST patients drawn from Reservists already separated from service could conceivably lead to demands for MST counseling and related services on a scale that is at least as great as VA's current patientload for MST-related care and that could be up to four times the current volume. Adjusting to meet changes in demand on that scale cannot be accomplished overnight. Even if potential changes in demand are adequately anticipated, and even if the new demand for care is spread out over several fiscal years, it is highly likely that VA will have to expand capacity for such care. Expanding capacity can be handled by 1) increasing VA facilities and staff, 2) by shifting substantial services to non-VA providers, or by 3) combining of those strategies. Regardless of the specific strategy implemented, such expansion of capacity imposes costs of its own beyond those estimated here.

Finally, the estimates provided in this report of the number of new patients who may seek treatment at VA if a new benefit is created are rooted in a primary assumption that current events may be rendering increasingly less tenable: that separation patterns and veteran/non-veteran status of former Reserve personnel continue in the next few years much as they have for the past decade. The expanded role of Reservists personnel in meeting the national security needs posed by the Iraq war and other international commitments may change those patterns in ways that are difficult to predict at this time. The most likely scenario is that more Reserve personnel will qualify for MST treatment given their status as active duty veterans. In that case, the total demand for services for treating MST will be much like this report has outlined, but a much larger share of the patients will come for treatment as veterans, not as former Reservists. The total cost of care will not be much different than has been outlined, but the fraction of care that is given under a special new program as opposed to being delivered as a normal part of VA services will be affected. Budgetary considerations must remain flexible enough to meet the cost where it arises.

### **C. Strengths and Limitations of the Investigation**

From a content perspective, one of the primary strengths of this investigation is that it explores experiences of sexual harassment and sexual assault among a group of former Reservists. While a significant body of research has documented high rates of military sexual trauma among active duty samples, this investigation is the first to document similarly high rates of military sexual trauma among members of the Reserve Components of the Armed Forces.

This investigation also boasts a number of strengths from a methodological perspective. A major strength of this survey was the use of a structured interview that contained questions from previously validated survey instruments. Use of these questionnaires allows comparisons of rates of

sexual trauma experienced by Reservists with rates of sexual trauma experienced by active duty and civilian populations. A related methodological strength during the data collection phase of the investigation was the use of the computer assisted telephone interview (CATI) program. This allowed greater certainty in the standardization of data collection by ensuring that the interviewer did not deviate from the script, but covered all specified loops given the participants' responses.

Additional methodological strengths include the fact that all research personnel were blind to the gender and Reserve Component of the participants throughout the data collection phase and the computer analysis phase. Accordingly, expectations about relative rates of sexual trauma by gender or component did not influence the work accomplished during these phases. In addition, study personnel responded flexibly to problems encountered in the DMDC source file, adapting the statistical methodology to allow computation of statistical weights adjusted for both ineligibility and misclassification. Thus, statistical weights appropriate to the self-reported Reserve Component could be used in the analysis.

Finally, the estimates of utilization and cost of treatment for Reservists with military sexual trauma generated in this report are based on actual VA experience in providing care for this condition. VA has developed considerable expertise in this type of care, treating an estimated 5,000 to 20,000 veterans each year over the last 5 or more years. Another possible source of utilization and cost estimates would be data from the Department of Defense, which has provided care to active military personnel with military sexual trauma. However, utilization and cost estimates drawn from the Department of Defense would likely reflect the costs of care of acute traumatic reactions rather than the care of more chronic traumatic reactions typically provided by VA.

Despite these strengths, some cautions must be used when interpreting the study's results. Because the study was limited by its mandate to former Reservists and to Reservists who served primarily on Active Duty for Training status, the results may not be generalizable to current Reservists or to those Reservists who have been repeatedly called to Active Duty. Future investigations will be necessary to confirm the rates of military sexual trauma among these populations. In addition, as with any survey based on interview, the participant's responses may be influenced by recall error or a reporting bias. In the future, it may be desirable to propose a validation study of the responses for a subsample of those who endorsed military sexual trauma and a subsample of those who did not. Those individuals could be contacted for a brief second interview, by mail or by telephone, and asked questions about specific outcomes for a study of agreement or disagreement in responses.

In hindsight, given the unexpectedly high rate of ineligibility found in the original target sample file provided by DMDC, it is unfortunate that the methodology did not allow for the completion of the telephone interview or a short form questionnaire on a subsample of those contacted who screened out as ineligible. Such data would have permitted alternate statistical analysis of the misclassification problem. However, this statistical limitation does not negatively impact the completion of the primary objectives of the study as presented here.

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## VII. Appendices

### Appendix A

#### Considerations for Sample Size Determination for “Military Sexual Trauma Among the Reserve Components of the Armed Forces”

##### Objective

We wish to estimate the prevalence of sexual trauma during active duty for training among former members of the reserve components of the Armed Forces to within two percent of the population parameter. That is, we wish to determine the sample size required to achieve an approximate 95% confidence interval of width .02 for the estimate of prevalence of sexual trauma. We shall consider males and females as two independent populations.

##### Summary

From a statistical viewpoint, sample sizes of 2,400 females (rounded to 2,500) and 1,224 males are adequate to estimate the prevalence of sexual trauma with a precision of  $\pm$  two percent. Given the relatively low levels of sexual assault expected among male reservists, the investigators have expressed the desire to increase the sample size of males to 2,000 to ensure an adequate number of cases of sexual assault. Thus, a total of 4,500 Reservists/Guard is planned.

##### Prevalence of Sexual Trauma

Since there are no existing reports of rates of sexual trauma experienced by reservists while on Active Duty for Training status, the sample sizes to be considered for the current investigation will be based on data from several sources. Accordingly, sample sizes for the current investigation will be calculated for a variety of estimates of prevalence of sexual trauma.

Data from the National Health Survey of Gulf War-Era Veterans and Their Families (NHS)<sup>1</sup> are presented in Table 1a to provide gender-specific estimates of the prevalence of sexual trauma, defined as sexual assault or sexual harassment, experienced while serving in the Persian Gulf. The 15,000 Gulf veterans in the NHS were composed of 40% Active, 33% Reserves, 27% Guard. Frequencies of sexual assault and sexual harassment were obtained from the NHS by the “type” variable for those deployed to the Gulf who responded to the survey and are presented in Table 1b. Alternatively, data from the 1988 and 1995 DMDC<sup>2</sup> studies of unwanted, uninvited sexual attention while at work during the past year among active duty personnel are provided in Table 1c.

Since these estimates vary widely and we have no estimate for the prevalence of sexual trauma in reservists during training, the sample sizes to be considered for this study will be calculated for a variety of estimates of prevalence of sexual trauma.

##### Sample Size

The sample size necessary to estimate a proportion with a specified precision can be derived from a confidence interval. This interval has approximately a .95 probability of containing the population parameter  $p$ . The translation of a width of a confidence interval into a sample size is used to achieve a specific level of precision associated with the estimate of  $p$ . The precision of an estimate is first described in terms of the length or width,  $w$ , of an  $\alpha$ -level confidence interval. The width is then used to calculate the number of observations necessary to obtain this desired degree of precision.

Suppose we wish to find the sample size necessary to estimate the proportion,  $p$ , with variance  $p(1-p)/n$ . We wish to estimate  $p$  to within  $w = .01$  units, or a margin of error of 1 percent; i.e., we wish the length of the 95% confidence interval for  $p$  to be .02 units. This sample size is given by the formula from Selvin<sup>3</sup>:

$$n = 1.96^2 (p) (1-p) / w^2$$

Subject matter considerations determine the value of the statistic  $w$ , the margin of error in the prevalence rate. The length of the  $\alpha$  - level confidence interval is a subjective decision, usually made on nonstatistical grounds. In this study, the cost of medical care for the individual could be considered in setting the value of  $w$ . If the confidence interval is very wide, an imprecise estimate of the cost will result. If the estimate of the prevalence of sexual trauma is inaccurate and is underestimated, the cost estimate will be underestimated. For the sake of argument, we will arbitrarily set  $w = 0.01$ , a very conservative level, and  $w = 0.02$  as an alternative, and calculate the sample sizes needed for these two cases.

The sample size  $n$  needed to estimate the prevalence with the specified degree of precision (confidence interval of width 0.01) is tabulated below in Table 2 for  $\pm 1\%$  margin of error and in Table 3 for  $\pm 2\%$  margin of error for various values of expected prevalence of sexual trauma.

The maximum sample size required occurs when the prevalence = 0.50. A conservative approach would be to use this maximum. For example, the estimate of prevalence of sexual trauma in males of 15% and in females of 50% give a combined sample size of 14,496 or approximately 14,500 as required to give  $\pm 1\%$  margin of error. For  $\pm 2\%$  margin of error in precision, the necessary sample sizes are 1,224 for males and 2,400 for females, a total of 3624 persons. These numbers will be inflated to 2,000 for males and 2,500 for females, a total of 4,500.

If larger sample sizes are within the budget, the estimates of  $p_M$  and  $p_F$  could be made more precise. Hence, the width of the confidence interval could be narrower. On the other hand, if less precision could be tolerated, the sample sizes required would decrease. For the purposes of this investigation, it was decided that a precision level of  $\pm 2\%$  margin of error is adequate.

#### Non-Response

Since the contractor is basing his estimate of price of the survey on the number of completed interviews, we do not need to inflate the desired sample sizes to allow for non-response. However, the contractor should provide response rates by various categories to permit calculation of response weights to be used in conjunction with the sampling weights to determine the adjusted weight in analysis for each individual.

#### Stratification

The next step is to consider stratification for other characteristics to ensure adequate representation, with the resulting smaller cell frequencies. A two-dimensional contingency table can be constructed by cross-classifying the 10-year data ( $N = 268,509$ ) of former reservists on such characteristics as the seven components of the reserve forces and gender. As an alternative to a more complex sampling design involving stratification on other variables, adjustment will be made in the regression model, used to estimate prevalence, for other demographic variables such as race, rank (officer or enlisted), geographic region, and other variables..

Generally, stratified random sampling produces estimates that are more precise than those produced by simple random sampling, i.e. lower standard errors may result from the estimation procedure. If it is thought that the stratum prevalence rates are very different, considerable reduction in the variance of an estimated prevalence can be obtained by use of stratified random sampling rather than simple random sampling. However, if the prevalence within strata are approximately equal, then little or nothing is gained by using stratified random sampling rather than simple random sampling. Estimates of sexual trauma among active duty personnel in the 1995 DMDC study<sup>2</sup> showed differences in prevalence by gender and by branch of service, suggesting



that for the current investigation, we should employ stratification by branch within the population of males and females.

#### Stratified Sampling with Proportional Allocation

Once we decide to use stratified sampling and specify the strata on the total number,  $n$ , of sample elements, the next important decision we must make is that of allocation or specification of how many elements are to be taken from each stratum under the constraint that a total of  $n$  elements are to be taken over all strata. We shall consider proportional allocation<sup>4</sup> for its wide use, simplicity and convenience. The number of elements  $n_h$  to be taken from each stratum is given by

$$n_h = N_h \times n/N$$

and is presented in Table 4. These elements  $n_h$  can be drawn by simple random sampling within each stratum.

Table 1a. Percent Distribution of Sexual Trauma while in the Gulf by Gender in 11,441 Persian Gulf Veterans.

	Male	Female
Sexual assault	0.2	3.3
Sexual harassment	0.6	23.7
Either Trauma	0.8	24.1

Table 1b. Percent of 11,441 Gulf War veterans who were exposed to sexual trauma while in the Gulf by gender

Type	Harassment		Assault	
	Male	Female	Male	Female
Active	0.4	26.9	0.3	2.4
Guard	0.9	26.7	0.2	3.9
Reserve	0.6	20.8	0.1	4.2
Total	0.6	23.7	0.2	3.3

Table 1c. Percent of active duty personnel who reported one or more incidents of military sexual trauma during prior year.

Source of Data <sup>2</sup>	<del>Harassment</del>		<del>Assault</del>	
	Male	Female	Male	Female
1988 DMDC	17	64	1	5
1995 DMDC	14	55	1	6

Table 2. Approximate sample size n to be selected from the population for various values of expected prevalence (p) when specified precision of estimate of p is w = 0.01.

Prevalence	95% Confidence Interval	Sample size
0.01	0.00 - 0.02	380
0.02	0.01 - 0.03	752
0.05	0.04 - 0.06	1,824
0.10	0.09 - 0.11	3,456
0.15	0.14 - 0.16	4,896
0.20	0.19 - 0.21	6,144
0.25	0.24 - 0.26	7,200
0.50	0.49 - 0.51	9,600
0.55	0.54 - 0.56	9,504
0.60	0.59 - 0.61	9,216
0.65	0.64 - 0.66	8,736

Table 3. Approximate sample size  $n$  to be selected from the population for various values of expected prevalence ( $p$ ) when specified precision of estimate of  $p$  is  $w = 0.02$ .

Prevalence	95% Confidence Interval	Sample size $n$
0.02	0.00 - 0.04	188
0.05	0.03 - 0.07	456
0.10	0.08 - 0.12	864
0.15	0.13 - 0.17	1,224
0.20	0.18 - 0.22	1,536
0.25	0.23 - 0.27	1,800
0.50	0.48 - 0.52	2,400
0.55	0.53 - 0.57	2,376
0.60	0.58 - 0.62	2,304
0.65	0.63 - 0.67	2,184

Table 4. Samples of  $n_{hm}$  males and  $n_{hf}$  females from 10-year populations of Reservists/Guard

Component	Stratum	Males		Females	
		Population	Sample	Population	Sample
	$h$	$N_h$	$n_{hm}$	$N_h$	$n_{hf}$
Army Guard	1	192,134	493	30,687	492
Army Reserve	2	385,501	989	92,128	1476
Navy Reserve	3	64,538	166	13,960	224
USMC Reserve	4	63,422	163	1,551	25
Air National Guard	5	16,116	41	4,572	73
USAF Reserve	6	55,739	143	12,638	203
USCG Reserve	7	2,113	5	464	7
Total		779,563	2,000	156,000	2,500

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4. Levy PS, and Lemeshow, S. *Sampling of Populations.* New York: Wiley; 1999, Section 6.5.2.

**Appendix B, Military Sexual Trauma Among the Reserve Components of the  
Armed Forces, Survey Instrument**

Schulman, Ronca and Bucuvalas, Inc.  
145 E 32<sup>nd</sup> Street, 5<sup>th</sup> FL NY, New York 10016  
STUDY #9622  
August 19, 2002

[RESP. \_\_\_\_\_]

**MILLENNIUM BILL STUDY OF FORMER RESERVISTS**

INTERVIEWER: \_\_\_\_\_ Date: \_\_\_\_\_  
TELEPHONE #: \_\_\_\_\_

-----  
SAMPLE READ IN:  
UPDATE NAME AND ADDRESS SAMPLE READ-IN.

**Section A**

1. Hi, my name is \_\_\_\_\_. I'm calling from SRBI, a national survey research organization. I am calling on the behalf of the Department of Veterans Affairs to conduct the Millennium Bill Study of former Reservists. They recently mailed you a letter explaining the study to you. Did you receive this letter and do you remember what it was about?

Yes=1 (SKIP TO Q.3)

No=2 (CONTINUE WITH Q.2 BUT IF AT ANY TIME THEY SAY THEY WANT THE LETTER, SKIP TO Q.12)

Want letter=7 (SKIP TO Q.12)

Not sure=8

Refused=9 (SKIP TO Q.11)

2. Do you have a few minutes now for me to tell you about the study and see if you are eligible?

Yes=1

No time now=0 (SCHEDULE A CALL BACK: \_\_\_\_/\_\_\_\_/\_\_\_\_ @ \_\_\_\_:\_\_\_\_)

Want letter=7 (SKIP TO Q.12)

Not sure=8 (RESPOND "Is it OK if I explain the study to you quickly and then we can figure out if you have time now or if there is a better time for me to call back?")

Refused to do interview at all=9 (SKIP TO Q.11)

3. RECORD FROM OBSERVATION. BUT IF NOT SURE BASED ON VOICE, ASK: Before I continue, I need to confirm a few things to make sure you are eligible for the study. Are you male or female?

Male=1

Female=2

Want letter=7 (SKIP TO Q.12)

Refuse=9 (RESPOND: "We need to know that information to continue with the survey." IF THEY STILL DON'T WANT TO TELL YOU, SAY "Thank you for your time and have a nice day." TERMINATE.)

4. Were you ever a member of the Reserves or the National Guard?

Yes=1

No=2 (Q4B :RESPOND: "We got your name from a list of people who have served in the Reserves or the Guard. Do you know why your name is on this list?" IF THEY CONTINUE TO SAY THAT THEY WERE NOT IN THE RESERVES SAY "Unfortunately, that means you are not eligible for our survey. Thank you for your time and have a nice day.")

Want letter=7 (SKIP TO Q.12)

Not sure=8 (RESPOND: "We need to know that information to continue with the survey.

Thank you for your time and have a nice day." TERMINATE.)

Refused=9 (RESPOND: "We need to know that information to continue with the survey." IF THEY STILL DON'T WANT TO TELL YOU, SAY "Thank you for your time and have a nice day." TERMINATE.)

5. Please tell me which branch or branches of the Military you served in when you were in the Reserves or National Guard. (MAY HAVE SERVED IN MORE THAN ONE.)

Army National Guard=1

Army Reserves=2

Naval Reserves=3

Marine Corps Reserves=4

Air National Guard=5

Air Force Reserves=6

Coast Guard Reserves=7

Not sure=8 (RESPOND: "Unfortunately, we need to know that information to determine if you are eligible for our survey. Thank you for your time and have a nice day.")

Refused=9 (RESPOND: "We need to know that information to continue with the survey."

IF THEY STILL DON'T WANT TO TELL YOU, SAY "Thank you for your time and have a nice day." TERMINATE.)

Want letter=10 (SKIP TO Q.12)

6. (ASK MEN) Were you ever drafted or did you ever enlist in an Active Duty Branch of the Armed Forces?

(ASK WOMEN) Did you ever enlist in an Active Duty Branch of the Armed Forces?

Yes=1 ask a6b1

No=2 skip to a7

Want letter=7 (SKIP TO Q.12)

Not sure=8 (RESPOND: "Unfortunately, we need to know that information to determine if you are eligible for our survey. Thank you for your time and have a nice day.")

Refused=9 (RESPOND: "We need to know that information to continue with the survey." IF THEY STILL DON'T WANT TO TELL YOU, SAY "Thank you for your time and have a nice day." TERMINATE.)

A6b1. Was this only for training purposes?

[INTERVIEWER IF "NOT SURE" (RESPOND : "Unfortunately, we need to know that information to determine if you are eligible for our survey.")

[IF "REFUSED" (RESPOND: "We need to know that information to continue with the survey." IF THEY STILL DON'T WANT TO TELL YOU, ENTER "REFUSED")

yes, only for training.....1 - go to a7

no, for more than training.....2 - go to a6b

Not sure=8 (RESPOND: "Unfortunately, we need to know that information to determine if you are eligible for our survey. Thank you for your time and have a nice day.")

Refused=9 (RESPOND: "We need to know that information to continue with the survey." IF THEY STILL DON'T WANT TO TELL YOU, SAY "Thank you for your time and have a nice day." TERMINATE.)

6b. RESPOND: "We got your name from a list of people who have served in the Reserves or Guard but did NOT serve in an Active Duty Branch of the Armed Forces. Do you know why your name is on this list?" \_\_\_\_ IF THEY CONTINUE TO SAY THAT THEY DID SERVE IN AN ACTIVE DUTY BRANCH (in CATI it says Reserves, not active duty-doesn't seem to give an option to change their mind) SAY "Unfortunately, that means you are not eligible for our survey. Thank you for your time and have a nice day.")

7. Were you ever ordered to Active Duty other than for training purposes only? (IF UNSURE, EXPLAIN "ACTIVE DUTY IS NOT ACTIVE DUTY FOR TRAINING. THE 2 WEEKS A YEAR, 1 WEEK-END A MONTH, AND 3 MONTHS OF BASIC TRAINING THAT RESERVISTS DO IS NOT CONSIDERED ACTIVE DUTY.")

Yes=1

No=2 (SKIP TO Q.8c)

Want letter=7 (SKIP TO Q.12)

Not sure=8 (IF STILL UNSURE AFTER CLARIFYING WITH INFORMATION ABOVE, RESPOND: "Unfortunately, we need to know that information to determine if you are eligible for our survey. Thank you for your time and have a nice day.")

Refused=9 (SAY: "Thank you for your time and have a nice day." TERMINATE.)

8. Did you serve the full period for which you were called to active duty? (IF RESPONDENT IS UNSURE YOU CAN EXPLAIN, "WHEN RESERVISTS ARE CALLED OR ORDERED TO ACTIVE DUTY, THEY ARE TOLD HOW LONG THEY ARE BEING CALLED FOR, FOR EXAMPLE 6 MONTHS. FREQUENTLY THEY ARE DE-ACTIVATED BEFORE THEY HAVE SERVED THE ENTIRE TIME PERIOD STATED ON THEIR MILITARY ORDERS THAT CALLED THEM TO ACTIVE DUTY")

Yes=1 (RESPOND: "Unfortunately that makes you ineligible for our study. Thank you for your time and have a nice day.") SCREEN OUT

No=2 (SKIP TO A8B)

Not sure=8 (IF STILL UNSURE AFTER CLARIFYING WITH INFORMATION ABOVE, RESPOND: "We need to know that information to continue with the survey. Thank you for your time and have a nice day." TERMINATE.)

Refused=9 (RESPOND: "We need to know that information to continue with the survey." IF THEY STILL DON'T WANT TO TELL YOU, SAY "Thank you for your time and have a nice day." TERMINATE.)

8b. After September 7<sup>th</sup>, 1980, did you serve for 24 months of continuous active duty?

Yes=1 (RESPOND: "Unfortunately that makes you ineligible for our study. Thank you for your time and have a nice day.") SCREEN OUT

No=2

Not sure=8 (RESPOND: "We need to know that information to continue with the survey. Thank you for your time and have a nice day." TERMINATE.)

Refused=9 (RESPOND: "We need to know that information to continue with the survey." IF THEY STILL DON'T WANT TO TELL YOU, SAY "Thank you for your time and have a nice day." TERMINATE.)

8c. OK, it appears that you are eligible so let me tell you more about the study before we proceed. The Boston VA Medical Center is conducting a study to examine some stressful events experienced by Reservists, and the extent to which Reservists have sought counseling related to those incidents. Your name, address, and telephone number were provided by the Department of Defense's Defense Manpower Data Center, which has a list of all persons who served in the Reserve Components of the Armed Forces. Your name was selected at random from this list.

As we stated in the letter, we would like to conduct an interview with you about your experiences while in the Reserves. The interview should last approximately 45 minutes. In the interview, I will ask some questions about your experiences before, during and after your time spent in the Reserves, as well as some general questions about your health and work status. The risk of participating in this study is expected to be minimal. For example, you may be asked some questions that are personal or sensitive in nature to you but you are free to choose not to answer any specific questions and you are free to withdraw at any point.

Although we do not expect the interview to be upsetting, if you do become upset, we can refer you to a clinician to speak with. While there is no specific benefit to you from participating in this study, we hope that the information we obtain can be used to better understand the experiences of Reservists, and potentially help them recover from any stressful experiences they had while in the Reserves. You do not have to take part in this study, and your refusal will not result in a loss of any government benefits. Do you have any questions about our project or what we are trying to do here?

Yes=1 (INTERVIEWER WILL APPROPRIATELY ANSWER QUESTIONS USING SAF)

No/NOT SURE=2

Wants letter=7 (SKIP TO Q.12)

9. Now that I've told you the study's purpose, may I have your consent to proceed with the interview?

Yes=1 (SKIP TO SECTION B)

No/NOT SURE=2

Wants letter=7 (SKIP TO Q.12)

Refused to do interview=9 (SKIP TO Q.11)

10. Can we schedule a better time to do the interview or do you not want to participate at all?

Does not want to participate=0 (CONTINUE WITH Q.11)

Wants to participate at a different time=1 (SCHEDULE A CALL BACK: \_\_/\_\_/\_\_ @ \_\_:\_\_)

11. Can you tell me why you're not willing to participate? \_\_\_\_\_ (RECORD RESPONSE) Ok, then, thank you for your time and have a nice day. (TERMINATE.)

12. Let me confirm that your address is \_\_\_\_\_, another letter will be sent to you right away. Someone will be calling back about a week after you have received the letter. Thank you for your time and cooperation. (END CALL-schedule callback for 7 days)

A CALLBACK ENTERED BEFORE A10 NEEDS TO START AT A1 (NOT QUALIFIED)

CALLBACK INTRO – START CALLBACK HERE FROM Q10 (QUALIFIED CALLBACK).

13. Hi, may I please speak with \_\_\_\_\_? Hi, my name is \_\_\_\_\_. I'm calling from SRBI, a national survey research organization. I am calling on the behalf of the Department of Veterans Affairs to conduct the Millennium Bill Study of former Reservists.

14. The Boston VA Medical Center is conducting a study to examine some stressful events experienced by Reservists, and the extent to which Reservists have sought counseling related to those incidents.

We would like to conduct an interview with you about your experiences while in the Reserves. We will use this information to better understand the nature of stressful events experienced by Reservists, and the extent to which Reservists have sought counseling related to those incidents. The interview should last approximately 45 minutes.



Do you have any questions about our project or what we are trying to do here?  
Yes=1 (INTERVIEWER WILL APPROPRIATELY ANSWER QUESTIONS USING SAF)  
No/NOT SURE=2  
Wants letter=7 (SKIP back TO Q.12)

15. Now that I've told you the study's purpose, may I have your consent to proceed with the interview?  
Yes=1 (SKIP TO SECTION B)  
No/NOT SURE=2 (SKIP TO Q.11)  
Wants letter=7 (SKIP back TO Q.12)  
Refused to do interview=9 (SKIP TO Q.11)

## Section B

First I'm going to ask you some questions about your health then I will ask you some questions about your service in the Reserves/Guard (READ IN FROM SAMPLE). This first section asks for your views about your health and how well you are able to do your usual activities. If you are unsure about how to answer, please give the best answer you can.

1. In general, would you say your health is excellent, very good, good, fair, or poor?  
excellent=1  
very good=2  
good=3  
fair=4  
poor=5

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Now I'm going to read a list of activities you might do during a typical day. As I read each item, please tell me if your health now limits you a lot, limits you a little, or does not limit you at all in these activities.

2. Moderate activities, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf. Does your health now limit you a lot, limit you a little, or not limit you at all? (IF PARTICIPANT RESPONDS THAT S/HE DOES NOT DO ACTIVITY, PROBE: Is that because of your health? AND TRY TO ANSWER THE QUESTION ACCORDING TO HIS/HER RESPONSE.)  
yes, limited a lot=1  
yes, limited a little=2  
no, not limited at all=3
3. Climbing several flights of stairs. Does your health now limit you a lot, limit you a little, or not limit you at all? (IF PARTICIPANT RESPONDS THAT S/HE DOES NOT DO ACTIVITY, PROBE: Is that because of your health? AND TRY TO ANSWER THE QUESTION ACCORDING TO HIS/HER RESPONSE.)  
yes, limited a lot=1  
yes, limited a little=2  
no, not limited at all=3
4. During the past 4 weeks, have you accomplished less than you would like as a result of your physical health?  
yes = 1, no=2

5. During the past 4 weeks, were you limited in the kind of work or other regular daily activities you do as a result of your physical health?  
yes = 1, no=2

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The following two questions ask about your emotions and your daily activities.

6. During the past 4 weeks, have you accomplished less than you would like as a result of any emotional problems, such as feeling depressed or anxious?  
yes =1, no=2
7. During the past 4 weeks, did you not do work or other regular activities as carefully as usual as a result of any emotional problems, such as feeling depressed or anxious?  
yes =1, no=2
8. During the past 4 weeks, how much did pain interfere with your normal work, including both work outside the home and housework? Did it interfere not at all, a little bit, moderately, quite a bit, or extremely?  
not at all=1, a little bit=2, moderately=3, quite a bit=4, extremely=5
9. During the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities like visiting with friends or relatives? Has it interfered all of the time, most of the time, a good bit of the time, some of the time, a little of the time, or none of the time?  
All of the time=1  
Most of the time=2  
A good bit of the time=3  
Some of the time=4  
A little of the time=5  
None of the time=6
10. How much of the time during the past 4 weeks have you felt calm and peaceful? (READ CATEGORIES ONLY IF NECESSARY.) Has it been all of the time, most of the time, a good bit of the time, some of the time, a little of the time, or none of the time?  
All of the time=1  
Most of the time=2  
A good bit of the time=3  
Some of the time=4  
A little of the time=5  
None of the time=6
11. How much of the time during the past 4 weeks did you have a lot of energy? (READ CATEGORIES ONLY IF NECESSARY.) All of the time, most of the time, a good bit of the time, some of the time, a little of the time, or none of the time?  
All of the time=1  
Most of the time=2  
A good bit of the time=3  
Some of the time=4  
A little of the time=5  
None of the time=6

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12. How much of the time during the past 4 weeks have you felt downhearted and blue?  
(READ CATEGORIES ONLY IF NECESSARY.) All of the time, most of the time, a good bit  
of the time, some of the time, a little of the time, or none of the time?  
All of the time=1  
Most of the time=2  
A good bit of the time=3  
Some of the time=4  
A little of the time=5  
None of the time=6

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#### Section C

Now I'm going to ask you about some medical conditions that a doctor may have told you that you  
have. (MAY STOP READING 'During the past 12 months have you been bothered by or treated  
for' AFTER Q.7)

1. During the past 12 months, have you been bothered by or treated for asthma, emphysema,  
chronic bronchitis, or brown lung?  
Yes=1  
No=2  
Not sure=8  
Refused=9
2. DELETE
3. During the past 12 months, have you been bothered by or treated for arthritis, rheumatism,  
or gout?  
Yes=1  
No=2  
Not sure=8  
Refused=9
4. DELETE
5. During the past 12 months, have you been bothered by or treated for high sugar or  
diabetes?  
Yes=1  
No=2  
Not sure=8  
Refused=9
6. DELETE
7. During the past 12 months, have you been treated for or bothered by heart or circulatory  
problems?  
Yes=1  
No=2 (SKIP TO Q16)  
Not sure=8  
Refused=9

8. During the past 12 months, have you been bothered by or treated for hardening of the arteries or arteriosclerosis (ART-EAR-EE-OH-SKLUH-ROW-SIS)?  
Yes=1  
No=2  
Not sure=8  
Refused=9
9. DELETE
10. During the past 12 months, have you been bothered by or treated for high blood pressure or hypertension?  
Yes=1  
No=2  
Not sure=8  
Refused=9
11. DELETE
12. During the past 12 months, have you had a heart attack?  
Yes=1  
No=2  
Not sure=8  
Refused=9
13. DELETE
14. DELETE
15. DELETE
16. During the past 12 months, have you been treated for cancer of any kind, including leukemia?  
Yes=1  
No=2  
Not sure=8  
Refused=9
17. DELETE
18. DELETE
19. DELETE
20. During the past 12 months, have you been bothered by or treated for a digestive system condition, such as ulcers, gall bladder trouble, or IBS? (IBS IS IRRITABLE BOWEL SYNDROME)  
Yes=1  
No=2  
Not sure=8  
Refused=9
21. DELETE

22. During the past 12 months, have you been bothered by or treated for a kidney, bladder or urinary tract problem?

Yes=1

No=2

Not sure=8

Refused=9

23. DELETE

24. (IF MALE, SKIP TO Q.28) During the past 12 months, have you been monitored by a doctor for trouble with your reproductive system, such as amenorrhea (AH-MEN-OR-EE-UH), meaning that you stopped getting your period for more than two months, irregular menstrual periods, a cyst, or growth of the uterus or ovaries, or a hysterectomy?

Yes=1

No=2 (SKIP TO Q.28)

Not sure=8 (SKIP TO Q.28)

Refused=9 (SKIP TO Q.28)

25. DELETE

26. DELETE

27. DELETE

28. During the past 12 months, have you been bothered by or treated for an auto-immune disorder, such as chronic fatigue syndrome, multiple sclerosis or fibromyalgia (FI-BRO-MY-AL-JUH)?

Yes=1

No=2

Not sure=8

Refused=9

29. DELETE

30. During the past 12 months have you been bothered by or treated for sexual dysfunction, for example, (MALE: erectile dysfunction or orgasmic disorder?) (FEMALE: sexual arousal disorder or a sexual pain disorder, such as vaginismus (VAJ-IN-ISS-MUS))?

Yes=1

No=2

Not sure=8

Refused=9

31. DELETE

32. During the past 12 months have you been bothered by or treated for a neck, back, or spine condition?

Yes=1

No=2

Not sure=8

Refused=9

33. DELETE

34. During the past 12 months have you been bothered by or treated for a thyroid (THIGH-ROYD) condition?

Yes=1

No=2

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Not sure=8  
Refused=9

- 35. DELETE
- 36. DELETE
- 37. DELETE

#### Section D

(IF MALE, SKIP TO Q.2)

1. Before I begin this next section, I just need to ask if you have you been pregnant during the last six months?

Yes=1, No=2, Not sure=8, Refused=9,

2. Now I'm going to ask you about some physical symptoms you may have experienced during the last six months. (MAY STOP READING 'During the past six months, how much have you been bothered by' AFTER Q.6 AND MAY SAY 'HOW ABOUT –BLANK-?')

During the past six months, how much have you been bothered by head pain or head aches?

Not at all, a little bit, quite a bit, or extremely?

Not at all=1, A little bit =2, Quite a bit=3, Extremely=4, Not sure=8, Refuse=9

3. During the past six months, how much have you been bothered by abdominal or stomach pain? Not at all, a little bit, quite a bit, or extremely?

Not at all=1, A little bit =2, Quite a bit=3, Extremely=4, Not sure=8, Refuse=9

4. During the past six months, how much have you been bothered by back pain? Not at all, a little bit, quite a bit, or extremely?

Not at all=1, A little bit =2, Quite a bit=3, Extremely=4, Not sure=8, Refuse=9

5. During the past six months, how much have you been bothered by nausea? Not at all, a little bit, quite a bit, or extremely?

Not at all=1, A little bit =2, Quite a bit=3, Extremely=4, Not sure=8, Refuse=9

6. During the past six months, how much have you been bothered by diarrhea? Not at all, a little bit, quite a bit, or extremely?

Not at all=1, A little bit =2, Quite a bit=3, Extremely=4, Not sure=8, Refuse=9

7. During the past six months, how much have you been bothered by bloating? Not at all, a little bit, quite a bit, or extremely?

Not at all=1, A little bit =2, Quite a bit=3, Extremely=4, Not sure=8, Refuse=9

8. During the past six months, how much have you been bothered by vomiting? Not at all, a little bit, quite a bit, or extremely?

Not at all=1, A little bit =2, Quite a bit=3, Extremely=4, Not sure=8, Refuse=9

9. During the past six months, how much have you been bothered by a complete inability to feel or to move a part of your body other than when it had just fallen asleep? Not at all, a little bit, quite a bit, or extremely? (IF PARTICIPANT ASKS FOR HOW LONG, SAY "FOR AT LEAST A FEW MINUTES.")

Not at all=1, A little bit =2, Quite a bit=3, Extremely=4, Not sure=8, Refuse=9

10. During the past six months, how much have you been bothered by amnesia (AM-KNEE-SHUH), that is a period of several hours or days where you couldn't remember anything afterwards about what happened during that time? Please do not include times when you were under the influence of alcohol, drugs, or medication that may account for the amnesia. Not at all, a little bit, quite a bit, or extremely?

Not at all=1, A little bit =2, Quite a bit=3, Extremely=4, Not sure=8, Refuse=9

11. During the past six months, how much have you been bothered by blindness or deafness, where for at least a minute or two you could not see out of both eyes or could not hear at all? Not at all, a little bit, quite a bit, or extremely?

Not at all=1, A little bit =2, Quite a bit=3, Extremely=4, Not sure=8, Refuse=9

12. During the past six months, how much have you been bothered by sexual indifference, meaning a lack of interest in sex? Not at all, a little bit, quite a bit, or extremely?

Not at all=1, A little bit =2, Quite a bit=3, Extremely=4, Not sure=8, Refuse=9

13. During the past six months, how much have you been bothered by pain during intercourse? Not at all, a little bit, quite a bit, extremely, or not applicable? (NOT APPLICABLE MEANS THEY HAVE NOT HAD INTERCOURSE DURING THE PAST SIX MONTHS)

Not at all=1, A little bit =2, Quite a bit=3, Extremely=4, Not sure=8, Refuse=9, Not applicable=10

(SKIP TO Q.15 FOR FEMALE PARTICIPANTS)

14. During the past six months, how much have you had trouble having an erection or ejaculating? Not at all, a little bit, quite a bit, or extremely?

Not at all=1, A little bit =2, Quite a bit=3, Extremely=4, Not sure=8, Refuse=9

(SKIP TO SECTION E WITH MALE PARTICIPANTS)

15. During the past six months, how much have you been bothered by irregular periods? Not at all, a little bit, quite a bit, extremely, or not applicable? (NOT APPLICABLE MEANS THAT THEY ARE IN MENOPAUSE)

Not at all=1, A little bit =2, Quite a bit=3, Extremely=4, Not sure=8, Refuse=9, Not applicable=10

16. During the past six months, how much have you been bothered by excessive menstrual bleeding or excessive pain during menstruation? Not at all, a little bit, quite a bit, extremely, or not applicable? (NOT APPLICABLE MEANS THAT THEY ARE IN MENOPAUSE)

Not at all=1, A little bit =2, Quite a bit=3, Extremely=4, Not sure=8, Refuse=9, Not applicable=10

## Section E

In the next section I will be asking you some general questions about yourself and your Military service. (ASK QUESTIONS 1-8 ONLY FOR THE COMPONENT(S) IN WHICH THEY REPORTED THEY SERVED IN SECTION A Q.5)

1.

Please tell me the month and year that you entered the Army National Guard? PROBE:

Your best estimate is fine.

\_\_\_ (mm/yyyy) if not sure or refuse enter 00 (for example 00/1982)

1b. And what month and year did you separate or leave the Army National Guard?

PROBE: Your best estimate is fine.

\_\_\_ (mm/yyyy) if not sure or refuse enter 00 (for example 00/1985) (SKIP TO Q.8 IF  
SERVED ONLY IN ARMY NATIONAL GUARD)

2.

Please tell me the month and year that you entered the Army Reserves? PROBE: Your  
best estimate is fine.

\_\_\_ (mm/yyyy) if not sure or refuse enter 00 (for example 00/1982)

2b. And what month and year did you separate or leave the Army Reserves? PROBE:  
Your best estimate is fine.

\_\_\_ (mm/yyyy) if not sure or refuse enter 00 (for example 00/1985) (SKIP TO Q.8 IF  
SERVED ONLY IN THE ARMY RESERVES)

3.

Please tell me the month and year that you entered the Naval Reserves? PROBE: Your  
best estimate is fine.

\_\_\_ (mm/yyyy) if not sure or refuse enter 00 (for example 00/1982)

3b. And what month and year did you separate or leave the Naval Reserves? PROBE:  
Your best estimate is fine.

\_\_\_ (mm/yyyy) if not sure or refuse enter 00 (for example 00/1985) (SKIP TO Q.8 IF  
RESERVED ONLY IN THE NAVAL RESERVES)

4.

Please tell me the month and year that you entered the Marine Corps Reserves? PROBE:  
Your best estimate is fine.

\_\_\_ (mm/yyyy) if not sure or refuse enter 00 (for example 00/1982)

4b. And what month and year did you separate or leave the Marine Corps Reserves?  
PROBE: Your best estimate is fine.

\_\_\_ (mm/yyyy) if not sure or refuse enter 00 (for example 00/1985) (SKIP TO Q.8 IF  
SERVED ONLY IN THE MARINE CORPS RESERVES)

5.

Please tell me the month and year that you entered the Air National Guard? PROBE: Your  
best estimate is fine.

\_\_\_ (mm/yyyy) if not sure or refuse enter 00 (for example 00/1982)

5b. And what month and year did you separate or leave the Air National Guard? PROBE:  
Your best estimate is fine.

\_\_\_ (mm/yyyy) if not sure or refuse enter 00 (for example 00/1985) (SKIP TO Q.8 IF  
SERVED ONLY IN THE AIR NATIONAL GUARD)

6.

Please tell me the month and year that you entered the Air Force Reserves? PROBE: Your  
best estimate is fine.

\_\_\_ (mm/yyyy) if not sure or refuse enter 00 (for example 00/1982)

6b. And what month and year did you separate or leave the Air Force Reserves? PROBE:  
Your best estimate is fine.

\_\_\_ (mm/yyyy) if not sure or refuse enter 00 (for example 00/1985) (SKIP TO Q.8 IF  
SERVED ONLY IN THE AIR FORCE RESERVES)



7.

Please tell me the month and year that you entered the Coast Guard Reserves?

PROBE: Your best estimate is fine.

\_\_\_\_ (mm/yyyy) if not sure or refuse enter 00 (for example 00/1982)

7b. And what month and year did you separate or leave the Coast Guard Reserves?

PROBE: Your best estimate is fine.

\_\_\_\_ (mm/yyyy) if not sure or refuse enter 00 (for example 00/1985)

8. What was your paygrade when you left the Reserves/Guard(**READ IN**)?

E-1=1	W-1=10	O-5=19 (SKIP TO Q.8.C)
E-2=2	W-2=11	O-6 or above=20 (SKIP TO Q.8.C)
E-3=3	W-3=12	Not sure=8
E-4=4	W-4=13	Refused=9
E-5=5	W-5=14	
E-6=6	O-1/O1E=15 (SKIP TO Q.8.C)	
E-7=7	O-2/O2E=16 (SKIP TO Q.8.C)	
E-8=8	O-3/O3E=17 (SKIP TO Q.8.C)	
E-9=9	O-4=18 (SKIP TO Q.8.C)	

8b. What was your primary MOS, Rating, or Specialty Code for the majority of the time you served in the Reserves/Guard(**READ IN**)? \_\_\_\_\_ (SPECIFY) (SKIP TO 9)

8c. What was your primary MOS, Area of Concentration, Primary Designator or Specialty Indicator for the majority of the time you served in the Reserves/Guard(**READ IN FROM SAMPLE**)? \_\_\_\_\_ (SPECIFY)

9. What was your job in the Reserves/Guard (**READ IN**)? for the majority of the time you served in the Reserves/Guard(**READ IN**)? \_\_\_\_\_ (SPECIFY)

10. Did you leave the Reserves/Guard(**READ IN**) because you wanted to?

Yes=1, No=2, Not sure=8, Refused=9

11. Did you leave the Reserves/Guard (**READ IN**) at the end or before the end of your enlistment or term?

At the end=1  
Before the end=2  
Not sure=8  
Refused=9

11a. DELETE

11a1 Which of the following describes your separation from the Reserves/Guard(**READ IN**)? Honorable, general under honorable conditions, or under other than honorable conditions? (IF PARTICIPANTS TRY TO GIVE YOU ANOTHER TERM TO DESCRIBE THEIR SEPARATION, RESPOND, "PLEASE CHOSE WHICH OF THESE THREE OPTIONS BEST DESCRIBES YOUR SEPARATION." EVERYONE IS GIVEN ONE OF THESE THREE, HOWEVER, THE DIFFERENT COMPONENTS HAVE ADDITIONAL DESCRIPTORS.)

Honorable=1  
General under honorable conditions=2  
Under other than honorable conditions=3  
Not sure=8  
Refused=9

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11B. Do you have a service connected disability?

Yes=1,

No=2 (SKIP TO Q.12)

Not sure=8 (SKIP TO Q.12)

Refused=9 (SKIP TO Q.12)

11C. How many service connected disabilities do you have?

RANGE 1-5, 8=ns, 9=ref

11d1. Please tell me what the (first) disability is? (OPEN END RECORD)

---

11e1. And what is the percentage for the (first) service connected disability?

Record percent (1-100) 101=ns, 102=ref

11d2. Please tell me what the (second) disability is? (OPEN END RECORD)

---

11e2. And what is the percentage for the (second) service connected disability?

Record percent (1-100) 101=ns, 102=ref

11d3. Please tell me what the (third) disability is? (OPEN END RECORD)

---

11e3. And what is the percentage for the (third) service connected disability?

Record percent (1-100) 101=ns, 102=ref

11d4. Please tell me what the (fourth) disability is? (OPEN END RECORD)

---

11e4. And what is the percentage for the (fourth) service connected disability?

Record percent (1-100) 101=ns, 102=ref

11d5. Please tell me what the (fifth) disability is? (OPEN END RECORD)

---

11e5. And what is the percentage for the (fifth) service connected disability?

Record percent (1-100) 101=ns, 102=ref

12. In general, do you think your life is better, the same or worse due to your service in the Reserves/Guard(READ IN)?

Better=1  
Same=2  
Worse=3  
Not sure=8  
Refused=9

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13. DELETE

14. DELETE

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#### Section F

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Now I'm going to ask you about talk or behavior related to your gender that you may have experienced that was unwanted, uninvited, and in which you did not participate willingly. I'm going to read you a list and I want to know how often you were in these situations while serving in the Reserves/Guard(READ IN). Would you be willing to answer a few questions about unwanted experiences you may have experienced serving in the Reserves/Guard(READ IN)?

[PROBE IF RESPONDENT IS NOT SURE ABOUT DOING THIS SECTION:

Is it OK if I begin asking you the questions and you can stop me at any time or say "PASS" if you don't want to answer that question? (INTERVIEWER: ALLOW RESPONDENTS TO "PASS" IF THEY ARE UNCOMFORTABLE ANSWERING AND ENTER "REFUSED". IF RESPONDENT WANTS TO STOP THIS SECTION AFTER YOU HAVE STARTED, do not READ questions TO RESP. BUT ENTER REFUSED TO ALL QUESTIONS FROM THAT POINT UNTIL YOU GET TO SECTION G)]

Yes=1 (continue )

No/Refused section =2 (SKIP TO NEXT SECTION G)

These situations could involve anyone, that is, any military or Reservist or Guard personnel, or civilians. These situations could have occurred on or off duty and they could involve one or more individuals, male or female. Please tell me if it happened never, once or twice, sometimes, often, or very often.

During your service in the Reserves/Guard(READ IN), how often, while you were on or off duty and on or off base, were you in situations where one or more individuals...

1. repeatedly told sexual stories or jokes that were offensive to you? Never, once or twice, sometimes, often, or very often? (STOP REPEATING RESPONSE CHOICES WHEN NO LONGER NEEDED.)

Never=1, once or twice=2, sometimes=3, often=4, very often=5, Not sure=8, Refused=9

2. whistled, called, or hooted at you in a sexual way? Never, once or twice, sometimes, often, or very often?

Never=1, once or twice=2, sometimes=3, often=4, very often=5, Not sure=8, Refused=9

3. made unwelcome attempts to draw you into a discussion of sexual matters, for example, attempted to discuss or comment on your sex life? Never, once or twice, sometimes, often, or very often?

Never=1, once or twice=2, sometimes=3, often=4, very often=5, Not sure=8, Refused=9

4. made crude and offensive sexual remarks, either publicly, like your workplace, or to you privately? Never, once or twice, sometimes, often, or very often?

Never=1, once or twice=2, sometimes=3, often=4, very often=5, Not sure=8, Refused=9

5. treated you differently because of your gender, for example, mistreated, slighted, or ignored you? Never, once or twice, sometimes, often, or very often?  
Never=1, once or twice=2, sometimes=3, often=4, very often=5, Not sure=8, Refused=9
6. made offensive remarks about your appearance, body, or sexual activities? Never, once or twice, sometimes, often, or very often?  
Never=1, once or twice=2, sometimes=3, often=4, very often=5, Not sure=8, Refused=9
7. made gestures or used body language of a sexual nature that embarrassed or offended you? Never, once or twice, sometimes, often, or very often?  
Never=1, once or twice=2, sometimes=3, often=4, very often=5, Not sure=8, Refused=9
8. displayed, used, or distributed sexist or suggestive materials, for example, pictures, stories, or pornography that you found offensive? Never, once or twice, sometimes, often, or very often?  
Never=1, once or twice=2, sometimes=3, often=4, very often=5, Not sure=8, Refused=9
9. made offensive sexist remarks, for example, suggesting that people of your gender are not suited for the kind of work you do? Never, once or twice, sometimes, often, or very often?  
Never=1, once or twice=2, sometimes=3, often=4, very often=5, Not sure=8, Refused=9
10. made unwanted attempts to establish a romantic sexual relationship with you despite your efforts to discourage it? Never, once or twice, sometimes, often, or very often?  
Never=1, once or twice=2, sometimes=3, often=4, very often=5, Not sure=8, Refused=9
11. put you down or was condescending to you because of your gender? Never, once or twice, sometimes, often, or very often?  
Never=1, once or twice=2, sometimes=3, often=4, very often=5, Not sure=8, Refused=9
12. stared, leered, or ogled you in a way that made you feel uncomfortable? Never, once or twice, sometimes, often, or very often?  
Never=1, once or twice=2, sometimes=3, often=4, very often=5, Not sure=8, Refused=9
13. exposed themselves physically, for example, "flashed" you in a way that embarrassed you or made you feel uncomfortable? Never, once or twice, sometimes, often, or very often?  
Never=1, once or twice=2, sometimes=3, often=4, very often=5, Not sure=8, Refused=9
14. continued to ask you for dates, drinks, dinner, etc., even though you said "No"? Never, once or twice, sometimes, often, or very often?  
Never=1, once or twice=2, sometimes=3, often=4, very often=5, Not sure=8, Refused=9
15. made you feel like you were being bribed with some sort of reward or special treatment to engage in sexual behavior? Never, once or twice, sometimes, often, or very often?  
Never=1, once or twice=2, sometimes=3, often=4, very often=5, Not sure=8, Refused=9
16. made you feel threatened with some sort of retaliation for not being sexually cooperative, for example, by mentioning an upcoming review? Never, once or twice, sometimes, often, or very often? (IF PARTICIPANT RESPONDS THAT SHE DID NOT FEEL THREATENED THAT IT WOULD HAPPEN BUT THAT IT IN FACT DID HAPPEN, ASK THEM TO RATE HOW OFTEN IT HAPPENED.)  
Never=1, once or twice=2, sometimes=3, often=4, very often=5, Not sure=8, Refused=9
17. touched you in a way that made you feel uncomfortable? Never, once or twice, sometimes, often, or very often?  
Never=1, once or twice=2, sometimes=3, often=4, very often=5, Not sure=8, Refused=9

18. made unwanted attempts to stroke, fondle, or kiss you? Never, once or twice, sometimes, often, or very often?

Never=1, once or twice=2, sometimes=3, often=4, very often=5, Not sure=8, Refused=9

19. treated you badly for refusing to have sex? Never, once or twice, sometimes, often, or very often?

Never=1, once or twice=2, sometimes=3, often=4, very often=5, Not sure=8, Refused=9

20. implied faster promotions or better treatment if you were sexually cooperative? Never, once or twice, sometimes, often, or very often?

Never=1, once or twice=2, sometimes=3, often=4, very often=5, Not sure=8, Refused=9

21. made you afraid you would be treated poorly if you didn't cooperate sexually? Never, once or twice, sometimes, often, or very often?

Never=1, once or twice=2, sometimes=3, often=4, very often=5, Not sure=8, Refused=9

22. offered to be sexually cooperative to you in exchange for a favor or special treatment from you, for example, offered sex in exchange for a good assignment? Never, once or twice, sometimes, often, or very often?

Never=1, once or twice=2, sometimes=3, often=4, very often=5, Not sure=8, Refused=9

23. attempted to have sex with you without your consent or against your will, but was unsuccessful? Never, once or twice, sometimes, often, or very often?

Never=1, once or twice=2, sometimes=3, often=4, very often=5, Not sure=8, Refused=9

24. had sex with you without your consent or against your will? Never, once or twice, sometimes, often, or very often?

Never=1, once or twice=2, sometimes=3, often=4, very often=5, Not sure=8, Refused=9

25. Are there any other gender or sex-related behaviors you experienced that I did not already ask about?

YES=1, ASK F25B

NO=2, NOT SURE=3, REF=4 - ALL SKIP TO F26

F25B - How often did you experience this?

Never=1, once or twice=2, sometimes=3, often=4, very often=5, Not sure=8, Refused=9

26. DELETE

27. DELETE

28. DELETE

29. DELETE

30. DELETE

31. DELETE

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31B. Were you on Active Duty for Training when any of these unwanted experiences took place? To be clear about the time frame I am talking about, Active Duty for Training includes the two weeks a year of annual training or AT, the one week-end a month of inactive duty training or IDT, and your attendance at any other formal schools while in the Reserves/Guard(READ IN).

Yes=1, No=2 (SKIP TO Q.32), Not sure=8 (SKIP TO Q.32), Refused=9 (SKIP TO Q.32)

31C. Approximately what percentage of these unwanted experiences took place while you were on Active Duty for Training? Was it approximately 25%, 50%, 75% or 100%?

25%=1

50%=2

75%=3

100%=4

Not sure=8

Refused=9

---

I'm going to continue to ask you about unwanted and uninvited experiences you may have had while serving in the Reserves/Guard(**READ IN**), only now the questions are going to be about specific types of unwanted sexual experiences. Please tell me if you had the experience I describe while serving in the Reserves/Guard(**READ IN**) whether you told anyone about it or not. Please remember that you can refuse to answer any question that I ask but if you are able to answer the questions it will help us better understand people's experiences while in the Reserves/Guard(**READ IN**). (IF PARTICIPANT ASKS WHY YOU KEEP ASKING ABOUT THE SAME THING SAY "We find that we get more accurate information if ask these questions in this manner.")

(MALE PARTICIPANTS SKIP TO Q32b)

32. (a) Did a man ever make you have sex by using force or threatening to harm you or someone close to you? Just so there is no mistake, by sex we mean putting a penis in your vagina.

Yes=1

No=2 (SKIP TO 34(a))

Not sure=8 (SKIP TO 34(a))

Refused=9 (SKIP TO 34(a))

33. (a) While you were serving in the Reserves/Guard(**READ IN**), on or off duty, how many times, that is different occasions, did this happen to you? PROBE: Your best estimate is fine.

Number of times \_\_\_\_ (range 1-97, 97=97 or more, 98 =Not sure, 99=Refused)

34. (a) Did anyone, male or female, ever make you have oral sex by using force or threat of harm? Just so there is no mistake, by oral sex we mean that a man put his penis in your mouth or someone, male or female, used their mouth or tongue on your vagina or anus?

Yes=1

No=2 (SKIP TO 36(a))

Not sure=8 (SKIP TO 36(a))

Refused=9 (SKIP TO 36(a))

35. (a) While you were serving in the Reserves/Guard(**READ IN**), on or off duty, how many times, that is different occasions, did this happen to you? PROBE: Your best estimate is fine.

Number of times \_\_\_\_ (range 1-97, 97=97 or more, 98 =Not sure, 99=Refused)

36. (a) Did anyone ever make you have anal sex by using force or threat of harm? Just so there is no mistake, by anal sex we mean that a man put his penis in your anus.

Yes=1

No=2 (SKIP TO 38(a))

Not sure=8 (SKIP TO 38(a))

Refused=9 (SKIP TO 38(a))

37. (a) While you were serving in the Reserves/Guard(**READ IN**), on or off duty, how many times, that is different occasions, did this happen to you? PROBE: Your best estimate is fine.

Number of times \_\_\_\_ (range 1-97, 97=97 or more, 98 =Not sure, 99=Refused)

38. (a) Did anyone, male or female, ever put fingers or objects in your vagina or anus against your will by using force or threats?

Yes=1

No=2 (SKIP TO 40(a))

Not sure=8 (SKIP TO 40(a))

Refused=9 (SKIP TO 40(a))

39. (a) While you were serving in the Reserves/Guard(**READ IN**), on or off duty, how many times, that is different occasions, did this happen to you? PROBE: Your best estimate is fine.

Number of times \_\_\_\_ (range 1-97, 97=97 or more, 98 =Not sure, 99=Refused)

40. (a) While you were serving in the Reserves/Guard(**READ IN**), on or off duty, did anyone ever use force, threat of force, pressure, coercion (CO-ER-SHUN), or nonphysical threats to touch your breasts or pubic area or made you touch his penis or her breast or vagina?

Yes=1

No=2 (SKIP TO 41c)

Not sure=8 (SKIP TO 41c)

Refused=9 (SKIP TO 41c)

41. (a) While you were serving in the Reserves/Guard(**READ IN**), on or off duty, how many times, that is different occasions, did this happen to you? PROBE: Your best estimate is fine.

Number of times \_\_\_\_ (range 1-97, 97=97 or more, 98 =Not sure, 99=Refused)

ASK Q.41C ONLY IF ANSWERED "YES" TO one of questions 32a, 34a, 36a, 38a, or 40a.

41C. Were you on Active Duty for Training when any of these unwanted sexual experiences you just told me about occurred?

Yes=1, (IF ANSWERED "YES" TO MORE THAN ONE OF QUESTIONS 32A, 34A, 36A, 38A, OR 40A, OR RESPONDED THAT ANY OF THEM HAPPENED MORE THAN ONCE IN QUESTIONS 33A, 35A, 37A, 39A, OR 41A, CONTINUE. OTHERWISE, RECORD 1 IN QUESTION 41D AND MOVE ON TO QUESTION 42)

No=2, Not sure=8, Refused=9

41D. How many of these unwanted sexual experiences you just told me about occurred while you were on Active Duty for Training?

Number of times: (range 1-50)

SKIP TO SECTION G IF RESPONDED TO LESS THAN FOUR OF Qs 1-15 WITH A FREQUENCY OF 'ONCE OR TWICE' (2=ONCE OR TWICE), 'NEVER' (1=NEVER) TO THE REMAINDER OF Qs 1-15, 'NEVER' TO Qs 16-25, AND 'NO' (2=N0) TO Qs 32, 34, 36, 38 AND 40, SKIP TO SECTION G..

42. DELETE

32. (b) SKIP

33. (b) SKIP

34. (b) Did anyone, male or female, ever make you have oral sex by using force or threat of harm? Just so there is no mistake, by oral sex we mean that a man put his penis in your mouth or someone, male or female, forced you to put your penis in their mouth or used their mouth or tongue on your penis or anus?

Yes=1

No=2 (SKIP TO 36(b))

Not sure=8 (SKIP TO 36(b))

Refused=9 (SKIP TO 36(b))

35. (b) While you were serving in the Reserves/Guard (READ IN), on or off duty, how many times, that is different occasions, did this happen to you? PROBE: Your best estimate is fine.

Number of times \_\_\_\_ (range 1-97, 97=97 or more, 98 =Not sure, 99=Refused)

36. (b) Did anyone ever make you have anal sex by using force or threat of harm? Just so there is no mistake, by anal sex we mean that a man put his penis in your anus or you were forced to put your penis in someone's anus?

Yes=1

No=2 (SKIP TO 38(b))

Not sure=8 (SKIP TO 38(b))

Refused=9 (SKIP TO 38(b))

37. (b) While you were serving in the Reserves/Guard (READ IN), on or off duty, how many times, that is different occasions, did this happen to you? PROBE: Your best estimate is fine.

Number of times \_\_\_\_ (range 1-97, 97=97 or more, 98 =Not sure, 99=Refused)

38. (b) Did anyone, male or female, ever put fingers or objects in your anus against your will by using force or threats?

Yes=1

No=2 (SKIP TO 40(b))

Not sure=8 (SKIP TO 40(b))

Refused=9 (SKIP TO 40(b))

39. (b) While you were serving in the Reserves/Guard(READ IN), on or off duty, how many times, that is different occasions, did this happen to you? PROBE: Your best estimate is fine.

Number of times \_\_\_\_ (range 1-97, 97=97 or more, 98 =Not sure, 99=Refused)

40. (b) While you were serving in the Reserves/Guard (READ IN), on or off duty, did anyone ever use force, threat of force, pressure, coercion (CO-ER-SHUN), or nonphysical threats to touch your penis or made you touch his penis or her breast or vagina by using force or the threat of force?

Yes=1

No=2 (SKIP TO 42(b))

Not sure=8 (SKIP TO 42(b))

Refused=9 (SKIP TO 42(b))

41. (b) While you were serving in the Reserves/Guard(READ IN), on or off duty, how many times, that is different occasions, did this happen to you? PROBE: Your best estimate is fine.

Number of times \_\_\_\_ (range 1-97, 97=97 or more, 98 =Not sure, 99=Refused)



ASK Q.41E ONLY IF ANSWERED "YES" TO one of questions 33b, 35b, 37b, 39b, or 41b

41E. Were you on Active Duty for Training when any of these unwanted sexual experiences you just told me about occurred?

Yes=1 No=2, Not sure=8, Refused=9

(IF ANSWERED "YES" TO MORE THAN ONE OF QUESTIONS 34b, 36b, 38b, 40b, OR RESPONDED THAT ANY OF THEM HAPPENED MORE THAN ONCE IN QUESTIONS 35b, 37b, 39b, 41b, CONTINUE. OTHERWISE, RECORD 1 IN QUESTION 41F AND MOVE ON TO QUESTION 43)

41F. How many of these unwanted sexual experiences you just told me about occurred while you were on Active Duty for Training?

Number of times: (range 1-50)

SKIP TO SECTION G IF RESPONDED TO LESS THAN FOUR OF Qs 1-15 WITH A FREQUENCY OF 'ONCE OR TWICE' (2=ONCE OR TWICE), 'NEVER' (1=NEVER) TO THE REMAINDER OF Qs 1-15, 'NEVER' TO Qs 16-25, **AND** 'NO' (2=N0) TO Qs 32, 34, 36, 38 AND 40, SKIP TO SECTION G.. 42. DELETE (b)

43 Now please think for a moment about all the unwanted situations you experienced while serving in the Reserves/Guard(**READ IN**) that you just told me about. I'd like you to think about which of these situations had the greatest effect on you. I'm going to read six possible ways of describing the situation and when I'm done I'd like you to pick the one that best describes the situation. Would you describe the situation that had the greatest effect on you as: one, verbal remarks, such as a remarks about your gender, your body, or your sex life; two, verbal requests, for example, asking you on a date or for sex; three, verbal requests that involved coercion, such as telling you that you won't get a promotion if you don't have sex, four, nonverbal behavior that does not include touching, such as displaying sexual pictures or making sexual gestures; five, physical behavior, including any kind of sexual touching except attempted or actual intercourse; or six, physical behavior that resulted in attempted or actual intercourse. (IF PARTICIPANT CHOSSES A NUMBER, REREAD THE DESCRIPTION TO MAKE SURE IT'S THE ONE THEY CHOSE.)

- ☐ One, verbal remarks, such as a remarks about your gender, your body, or your sex life=1
  - ☐ Two, verbal requests, for example, asking you on a date or for sex=2
  - ☐ Three, verbal requests that involve coercion, such as telling you that you won't get a promotion if you don't go on a date or have sex=3
  - ☐ Four, nonverbal behavior that does not include touching, such as displaying sexual pictures or making sexual gestures=4
  - ☐ Five, physical behavior, including any kind of sexual touching except attempted or actual intercourse=5
  - ☐ six, physical behavior that resulted in attempted or actual intercourse=6
  - ☐ not sure=8
  - ☐ refused=9
-

Please continue to think about this situation, the one that had the greatest effect on you. I'm going to ask you a series of questions about it.

44. Was it a single incident, meaning it happened once, or a series of incidents where the same person or people did this to you over a period of days, weeks, or months?

Single event=1 (SKIP TO Q.47)

Series of events=2

Not Sure=8

Refused=9

45. How long did this situation last? Was it one month or less, two to six months, six months to one year, one to five years, or more than five years?

(IF RESPONDS 'NOT SURE' PLEASE ASK, "Can you give me your best guess?")

One month or less=1, Two to six months=2, Six months to one year=3, One to five years=4,

More than five years=5

Not Sure=8

Refused=9

46. During the time it was happening, how often did it happen? Almost daily, ten or more days a month but not daily, between five and ten days a month, between one and five days a month, or very intermittently? (INTERMITTENTLY MEANS THAT ON AVERAGE IT HAPPENED LESS THAN FIVE DAYS A MONTH BUT VARIED QUITE A BIT FROM MONTH TO MONTH, FOR EXAMPLE, SOME MONTHS ZERO DAYS AND SOME TEN DAYS. IF RESPONDS THAT THEY ONLY SAW THE PERSON ONE WEEK-END A MONTH, THEN ASK "THEN IT HAPPENED BETWEEN ONE AND FIVE DAY A MONTH?")

Almost daily=1

Ten or more days a month but not daily=2

Between five and ten days a month=3

Between one and five days a month=4

Very intermittently=5

Not sure=8

Refused=9

47. Can you tell me approximately what year or years it was when this happened?

PROBE: Your best estimate is fine.

\_\_\_\_\_ YEAR (MAY RECORD YEAR RANGE IF WAS A SERIES OF INCIDENTS)

(enter as yyyy or yyyy-yyyy, such as 1982 or 1982-1985)

Not Sure=8888

Refused=9999

- 47b. Did this situation, the one that had the greatest effect on you, happen when you were on Active Duty for Training, on or off duty, on or off base?

Yes=1

No=2

Not sure=8 (Vol)

Refused=9 (Vol)

IF ANSWERED "YES" TO AT LEAST ONE OF QUESTIONS 23, 24, 32, 34, 36, 38, OR 40, CONTINUE BELOW. IF DID NOT, SKIP TO Q51.

48. During this (these) incident(s) were you ever afraid that you might be seriously injured or even killed?

Yes=1

No=2

Not sure=8

Refused=9

49. Did you suffer serious physical injuries, minor injuries or no injuries, as a result of the incident(s)?  
No injuries=0  
Minor injuries=1  
Serious injuries=2  
Not sure=8  
Refused=9
50. Did this person (OR "THESE PEOPLE" IF REPORTED MORE THAN 1 IN Q42) ever use a gun, knife, club or some other object as a weapon to make you do these things?  
Yes=1  
No=2  
Not sure=8  
Refused=9
51. How many people were involved in the situation that had the greatest effect on you? Was it one, two, three to five, six to ten people, or more than ten people? ()  
One=1 (SKIP TO Q.52(b))  
Two=2  
Three to five=3  
Six to ten=4  
More than ten=5  
Not sure=8  
Refused=9
52. (a) Were the people who did this male or female or both?  
  
Male=1  
Female=2  
Both=3  
Not sure=8  
Refused=9
53. (a) Did you know them?  
Yes=1  
No=2  
Knew some but not all=3  
Not sure=8  
Refused=9
54. (a) Were they military, civilian, or both? (MILITARY INCLUDES THOSE IN THE RESERVES OR ACTIVE FORCES IN THIS QUESTION)  
Military=1  
Civilian=2 (SKIP TO Q.61(a))  
Both=3  
Not sure=8 (SKIP TO Q.63)  
Refused=9 (SKIP TO Q.63)

Were any of these people... (IF PARTICIPANT INDICATES AT ANY POINT WHILE ASKING Qs 55(a)-62(a) THAT ALL OF THE PEOPLE HAVE BEEN ACCOUNTED FOR, SKIP TO Q.63)

55. (a) someone senior to you in the Reserves?  
Yes=1  
No=2  
Not sure=8  
Refused=9

56. (a) someone of equal rank to you in the Reserves?

Yes=1

No=2

Not sure=8

Refused=9

57. (a) someone junior to you in the Reserves?

Yes=1

No=2

Not sure=8

Refused=9

58. (a) someone senior to you in Active Duty Forces?

Yes=1

No=2

Not sure=8

Refused=9

59. (a) someone of equal rank to you in Active Duty Forces?

Yes=1

No=2

Not sure=8

Refused=9

60. (a) someone junior to you in Active Duty Forces?

Yes=1 (SKIP TO Q.63 IF ANSWER "MILITARY" IN Q.54)

No=2 (SKIP TO Q.63 IF ANSWER "MILITARY" IN Q.54)

Not sure=8 (SKIP TO Q.63 IF ANSWER "MILITARY" IN Q.54)

Refused=9 (SKIP TO Q.63 IF ANSWER "MILITARY" IN Q.54)

61. (a) a civilian who was a government employee?

Yes=1

No=2

Not sure=8

Refused=9

62. (a) a civilian who was not a government employee?

Yes=1 (SKIP TO Q.63)

No=2 (SKIP TO Q.63)

Not sure=8 (SKIP TO Q.63)

Refused=9 (SKIP TO Q.63)

52. (b) Was the person who did this male or female?

Male=1

Female=2

Not sure=8

Refused=9

53. (b) Did you know the person?

Yes=1

No=2

Not sure=8

Refused=9

54. (b) Was the person in the Reserves, in Active Duty forces, or were they a civilian?

Reserves=1

Active Duty forces=2 (SKIP TO Q.58(b))

Civilian=3 (SKIP TO Q.61(b))

Not sure=8 (SKIP TO Q.63)

Refused=9 (SKIP TO Q.63)

Was the person...

55. (b) someone senior to you in the Reserves?

Yes=1 (SKIP TO Q.63)

No=2

Not sure=8 (SKIP TO Q.63)

Refused=9 (SKIP TO Q.63)

56. (b) someone of equal rank to you in the Reserves?

Yes=1 (SKIP TO Q.63)

No=2

Not sure=8 (SKIP TO Q.63)

Refused=9 (SKIP TO Q.63)

57. (b) someone junior to you in the Reserves?

Yes=1 (SKIP TO Q.63)

No=2

Not sure=8 (SKIP TO Q.63)

Refused=9 (SKIP TO Q.63)

58. (b) someone senior to you in Active Duty Forces?

Yes=1 (SKIP TO Q.63)

No=2

Not sure=8 (SKIP TO Q.63)

Refused=9 (SKIP TO Q.63)

59. (b) someone of equal rank to you in Active Duty Forces?

Yes=1 (SKIP TO Q.63)

No=2

Not sure=8 (SKIP TO Q.63)

Refused=9 (SKIP TO Q.63)

60. (b) someone junior to you in Active Duty Forces?

Yes=1 (SKIP TO Q.63)

No=2

Not sure=8 (SKIP TO Q.63)

Refused=9 (SKIP TO Q.63)

61. (b) a civilian who was a government employee?

Yes=1 (SKIP TO Q.63)

No=2

Not sure=8 (SKIP TO Q.63)

Refused=9 (SKIP TO Q.63)

62. (b) a civilian who was not a government employee?

Yes=1

No=2

Not sure=8

Refused=9

63. What component of the Reserves were you in when this happened? (ASK THIS QUESTION ONLY OF THOSE WHO REPORTED THAT THEY WERE IN MORE THAN ONE COMPONENT IN SECTION A Q.5)

Army National Guard=1

Army Reserve=2

Naval Reserve=3

Marine Corps Reserve=4

Air National Guard=5

Air Force Reserve=6

Coast Guard Reserve=7

Not sure=8

Refused=9

64. DELETE

65. How much of this situation occurred at work, that is, the place where you performed your military duties? Was it all of it, most of it, half of it, some of it, or none of it?

All of it occurred at work=1

Most of it occurred at work; some at other place(s)=2

Half of it occurred at work; half at other place(s)=3

Some of it occurred at work; most at other place(s)=4

None of occurred at work; all at other place(s)=5

Not sure=8

Refused=9

66. How much of this situation occurred during duty hours? Was it all of it, most of it, half of it, some of it, or none of it?

All of it occurred during duty hours=1

Most of it occurred during duty hours; but some off-duty=2

Half of it occurred during duty hours; but half off-duty=3

Some of it occurred during duty hours; but most off-duty=4

None of occurred during duty hours; all off-duty=5

Not sure=8 refused=9

67. DELETE

68. DELETE

70. (DELETE)

71. (DELETE)

72. (DELETE).

73. (DELETE)

74. (DELETE)

75. (DELETE)

76. (DELETE)

77. (DELETE )

78. (DELETE )

I will now read you a list of problems and complaints that people sometimes have in response to these kinds of situations. Please listen to each one carefully, then decide how much you have been bothered by that problem. (INTERVIEWER MAY BEGIN TO SAY "AND THE LAST MONTH?" RATHER THAN REPEATING THE ENTIRE QUESTION AGAIN ONCE THE PATTERN HAS BECOME CLEAR TO THE PARTICIPANT. IF PARTICIPANT EVER SAYS THAT IT HAPPENS MORE DURING THE LAST MONTH THAN IT DID DURING THE WORST TIME, ASK THEM TO CLARIFY AND RECORD APPROPRIATE RESPONSE)

79. At any time since it happened, during the worst time, how much were you bothered by repeated, disturbing memories, thoughts, or images of the situation? Not at all, a little bit, moderately, quite a bit, or extremely?  
not at all=1 (SKIP TO Q.81)  
a little bit=2, moderately=3, quite a bit=4, extremely=5
80. IN THE LAST MONTH, how much have you been bothered by repeated, disturbing memories, thoughts, or images of the situation?  
not at all=1, a little bit=2, moderately=3, quite a bit=4, extremely=5
81. At any time since it happened, during the worst time, how much were you bothered by repeated, disturbing dreams of the situation? Not at all, a little bit, moderately, quite a bit, or extremely?  
not at all=1 (SKIP TO Q.83)  
a little bit=2, moderately=3, quite a bit=4, extremely=5
82. IN THE LAST MONTH, how much have you been bothered by repeated, disturbing dreams of the situation?  
not at all=1, a little bit=2, moderately=3, quite a bit=4, extremely=5
83. At any time since it happened, during the worst time, how much were you bothered by suddenly acting or feeling as if the situation were happening again, as if you were reliving it? Not at all, a little bit, moderately, quite a bit, or extremely?  
not at all=1 (SKIP TO Q.85)  
a little bit=2, moderately=3, quite a bit=4, extremely=5
84. IN THE LAST MONTH, how much have you been bothered by suddenly acting or feeling as if the situation were happening again, as if you were reliving it?  
not at all=1, a little bit=2, moderately=3, quite a bit=4, extremely=5
85. At any time since it happened, during the worst time, how much were you bothered by feeling very upset when something reminded you of the situation? Not at all, a little bit, moderately, quite a bit, or extremely?  
not at all=1 (SKIP TO Q.87)  
a little bit=2, moderately=3, quite a bit=4, extremely=5
86. IN THE LAST MONTH, how much have you been bothered by feeling very upset when something reminded you of the situation? Not at all, a little bit, moderately, quite a bit, or extremely?  
not at all=1  
a little bit=2, moderately=3, quite a bit=4, extremely=5

87. At any time since it happened, during the worst time, how much were you bothered by having physical reactions, such as your heart pounding, trouble breathing, or sweating, when something reminded you of the situation? Not at all, a little bit, moderately, quite a bit, or extremely?  
not at all=1 (SKIP TO Q.89)  
a little bit=2, moderately=3, quite a bit=4, extremely=5
88. IN THE LAST MONTH, how much have you been bothered by having physical reactions, such as your heart pounding, trouble breathing, sweating, when something reminded you of the situation? Not at all, a little bit, moderately, quite a bit, or extremely?  
not at all=1, a little bit=2, moderately=3, quite a bit=4, extremely=5
89. At any time since it happened, during the worst time, how much did you avoid thinking or talking about the situation or avoid having feelings related to it? Not at all, a little bit, moderately, quite a bit, or extremely?  
not at all=1 (SKIP TO Q.91)  
a little bit=2, moderately=3, quite a bit=4, extremely=5
90. IN THE LAST MONTH, how much have you avoided thinking or talking about the situation or avoided having feelings related to it? Not at all, a little bit, moderately, quite a bit, or extremely?  
not at all=1, a little bit=2, moderately=3, quite a bit=4, extremely=5
91. At any time since it happened, during the worst time, how much did you avoid activities or situations because they reminded you of the situation? Not at all, a little bit, moderately, quite a bit, or extremely?  
not at all=1 (SKIP TO Q.93)  
a little bit=2, moderately=3, quite a bit=4, extremely=5
92. IN THE LAST MONTH, how much have you avoided activities or situations because they remind you of the situation? Not at all, a little bit, moderately, quite a bit, or extremely?  
not at all=1, a little bit=2, moderately=3, quite a bit=4, extremely=5
93. At any time since it happened, during the worst time, how much did you have trouble remembering important parts of the situation? Not at all, a little bit, moderately, quite a bit, or extremely?  
not at all=1 (SKIP TO Q.95)  
a little bit=2, moderately=3, quite a bit=4, extremely=5
94. IN THE LAST MONTH, how much have you had trouble remembering important parts of the situation? Not at all, a little bit, moderately, quite a bit, or extremely?  
not at all=1, a little bit=2, moderately=3, quite a bit=4, extremely=5
95. At any time since it happened, during the worst time, how much were you bothered by lost of interest in activities that you used to enjoy? Not at all, a little bit, moderately, quite a bit, or extremely?  
not at all=1 (SKIP TO Q.97)  
a little bit=2, moderately=3, quite a bit=4, extremely=5
96. IN THE LAST MONTH, how much have you been bothered by lost of interest in activities that you used to enjoy? Not at all, a little bit, moderately, quite a bit, or extremely?  
not at all=1, a little bit=2, moderately=3, quite a bit=4, extremely=5



97. At any time since it happened, during the worst time, how much did you feel distant or cut off from other people? Not at all, a little bit, moderately, quite a bit, or extremely?  
not at all=1 (SKIP TO Q.9)  
a little bit=2, moderately=3, quite a bit=4, extremely=5
98. IN THE LAST MONTH, how much have you felt distant or cut off from other people? Not at all, a little bit, moderately, quite a bit, or extremely?  
not at all=1, a little bit=2, moderately=3, quite a bit=4, extremely=5
99. At any time since it happened, during the worst time, how much did you feel emotionally numb or been unable to have loving feelings for those close to you? Not at all, a little bit, moderately, quite a bit, or extremely?  
not at all=1 (SKIP TO Q.101)  
a little bit=2, moderately=3, quite a bit=4, extremely=5
100. IN THE LAST MONTH, how much have you felt emotionally numb or been unable to have loving feelings for those close to you? Not at all, a little bit, moderately, quite a bit, or extremely?  
not at all=1, a little bit=2, moderately=3, quite a bit=4, extremely=5
101. At any time since it happened, during the worst time, how much were you bothered by feeling as if your future somehow would be cut short? Not at all, a little bit, moderately, quite a bit, or extremely?  
not at all=1 (SKIP TO Q.103)  
a little bit=2, moderately=3, quite a bit=4, extremely=5
102. IN THE LAST MONTH, how much have you been bothered by feeling as if your future somehow will be cut short? Not at all, a little bit, moderately, quite a bit, or extremely?  
not at all=1, a little bit=2, moderately=3, quite a bit=4, extremely=5
103. At any time since it happened, during the worst time, how much were you bothered by trouble falling or staying asleep? Not at all, a little bit, moderately, quite a bit, or extremely?  
not at all=1 (SKIP TO Q.105)  
a little bit=2, moderately=3, quite a bit=4, extremely=5
104. IN THE LAST MONTH, how much have you been bothered by trouble falling or staying asleep? Not at all, a little bit, moderately, quite a bit, or extremely?  
not at all=1, a little bit=2, moderately=3, quite a bit=4, extremely=5
105. At any time since it happened, during the worst time, how much were you bothered by feeling irritable or having angry outbursts? Not at all, a little bit, moderately, quite a bit, or extremely?  
not at all=1 (SKIP TO Q.107)  
a little bit=2, moderately=3, quite a bit=4, extremely=5
106. IN THE LAST MONTH, how much have you been bothered by feeling irritable or having angry outbursts? Not at all, a little bit, moderately, quite a bit, or extremely?  
not at all=1, a little bit=2, moderately=3, quite a bit=4, extremely=5

107. At any time since it happened, during the worst time, how much were you bothered by difficulty concentrating? Not at all, a little bit, moderately, quite a bit, or extremely?  
not at all=1 (SKIP TO Q.109)  
a little bit=2, moderately=3, quite a bit=4, extremely=5

108. IN THE LAST MONTH, how much have you been bothered by difficulty concentrating? Not at all, a little bit, moderately, quite a bit, or extremely?  
not at all=1, a little bit=2, moderately=3, quite a bit=4, extremely=5

109. At any time since it happened, during the worst time, how much were you "superalert" or watchful or on guard? Not at all, a little bit, moderately, quite a bit, or extremely?  
not at all=1 (SKIP TO Q.111)  
a little bit=2, moderately=3, quite a bit=4, extremely=5

110. IN THE LAST MONTH, how much have you been "superalert" or watchful or on guard? Not at all, a little bit, moderately, quite a bit, or extremely?  
not at all=1, a little bit=2, moderately=3, quite a bit=4, extremely=5

111. At any time since it happened, during the worst time, how much were you bothered by feeling jumpy or easily startled? Not at all, a little bit, moderately, quite a bit, or extremely?  
not at all=1 (SKIP TO Q.113)  
a little bit=2, moderately=3, quite a bit=4, extremely=5

112. IN THE LAST MONTH, how much have you been bothered by feeling jumpy or easily startled? Not at all, a little bit, moderately, quite a bit, or extremely?  
not at all=1, a little bit=2, moderately=3, quite a bit=4, extremely=5

Now I'm going to ask you rate to what extent you experienced the following effects as a result of this situation.

113. I didn't perform as well at my job. Was it to a very large extent, to a large extent, to a moderate extent, to a small extent, or not at all?  
Very large extent=1, Large extent=2, Moderate extent=3, Small extent=4, Not at all=5,  
Not sure=8, Refused=9

114. My performance rating was unfairly lowered. Was it to a very large extent, to a large extent, to a moderate extent, to a small extent, or not at all?  
Very large extent=1, Large extent=2, Moderate extent=3, Small extent=4, Not at all=5,  
Not sure=8, Refused=9

115. My chance of promotion or advancement in the Reserves/Guard(READ IN) was negatively impacted. Was it to a very large extent, to a large extent, to a moderate extent, to a small extent, or not at all?  
Very large extent=1, Large extent=2, Moderate extent=3, Small extent=4, Not at all=5,  
Not sure=8, Refused=9

116. DELETE

117. DELETE

118. DELETE

119. My feelings about being in the Reserves/Guard(READ IN) were negatively affected. To a very large extent, to a large extent, to a moderate extent, to a small extent, or not at all?  
Very large extent=1, Large extent=2, Moderate extent=3, Small extent=4, Not at all=5,  
Not sure=8, Refused=9

120. It impacted my decision to leave the Reserves/Guard(READ IN). To a very large extent, to a large extent, to a moderate extent, to a small extent, or not at all? (IF RESPONDS THAT THEY DID NOT DECIDE TO LEAVE RESERVES, FOR EXAMPLE, THEY WERE INVOLUNTARILY GIVEN A MEDICAL DISCHARGE, THEN CLARIFY "THEN IT DID NOT IMPACT YOUR DECISION ABOUT LEAVING THE RESERVES/GUARD (READ IN)?" AND IF THEY RESPOND THAT IT DID NOT IMPACT THEIR DECISION, RECORD 'NOT AT ALL')  
Very large extent=1, Large extent=2, Moderate extent=3, Small extent=4, Not at all=5,  
Not sure=8, Refused=9

121. I became ill or suffered physical problems. To a very large extent, to a large extent, to a moderate extent, to a small extent, or not at all?  
Very large extent=1, Large extent=2, Moderate extent=3, Small extent=4, Not at all=5,  
Not sure=8, Refused=9

122. My emotional well being was negatively impacted. To a very large extent, to a large extent, to a moderate extent, to a small extent, or not at all?  
Very large extent=1, Large extent=2, Moderate extent=3, Small extent=4, Not at all=5,  
Not sure=8, Refused=9

123. My friendships outside of work were negatively impacted. To a very large extent, to a large extent, to a moderate extent, to a small extent, or not at all?  
Very large extent=1, Large extent=2, Moderate extent=3, Small extent=4, Not at all=5,  
Not sure=8, Refused=9

124. My relationship with my partner or my spouse was negatively impacted. To a very large extent, to a large extent, to a moderate extent, to a small extent, or not at all?  
Very large extent=1, Large extent=2, Moderate extent=3, Small extent=4, Not at all=5,  
Not applicable=6 (DIDN'T HAVE A PARTNER OR A SPOUSE), Not sure=8, Refused=9

125. My interest in sexual activity was diminished. To a very large extent, to a large extent, to a moderate extent, to a small extent, or not at all?  
Very large extent=1, Large extent=2, Moderate extent=3, Small extent=4, Not at all=5,  
Not sure=8, Refused=9

There are many different ways that people deal with situations like this and no one way is right or wrong. I'd like to ask you about different ways you may have dealt with the situation.

126. Did you report the situation through official channels to a person with the expectation that the person should or would do something about it? (IF RESPONDS THAT THEIR WAS NO CHANNEL FOR REPORTING, RECORD "NO".)  
No=2 (SKIP TO Q127(b))  
Yes=1 (IF YES, PLEASE SPECIFY THE PERSON'S TITLE)

---

Not sure=8 (SKIP TO Q127(b))  
Refused=9 (SKIP TO Q127(b))

127. (a) Did they do anything about the situation to correct it?  
Yes=1  
No=2  
Not sure=8  
Refused=9

128. (a) DELETE

129. (a) Were you encouraged to drop the complaint by the person or the office you reported the incident to?  
Yes=1  
No=2  
Not sure=8  
Refused=9

130. (a) How satisfied were you with the complaint process? Were you very satisfied, satisfied, neither satisfied nor dissatisfied, dissatisfied, or very dissatisfied?  
Very satisfied=1, (SKIP TO Q.133)  
Satisfied=2, (SKIP TO Q.133)  
Neither satisfied nor dissatisfied=3, (SKIP TO Q.133)  
Dissatisfied=4, (SKIP TO Q.133)  
Very dissatisfied=5 (SKIP TO Q.133)  
Not sure=8 (SKIP TO Q.133)  
Refused=9 (SKIP TO Q.133)

131. (a) SKIP

132. (a) SKIP

127. (b) There are many reasons that people don't report these kinds of situations. Please tell me how much the following were reasons you did not report the behavior.  
I did not know who to report it to and/or I wasn't informed about the complaint process. To a very large extent, to a large extent, to a moderate extent, to a small extent, or not at all?  
Very large extent=1, Large extent=2, Moderate extent=3, Small extent=4, Not at all=5,  
Not sure=8, Refused=9

128. DELETE

129. (b) I thought I would not be believed or that nothing would be done even if I was believed. To a very large extent, to a large extent, to a moderate extent, to a small extent, or not at all?  
Very large extent=1, Large extent=2, Moderate extent=3, Small extent=4, Not at all=5,  
Not sure=8, Refused=9

130. (b) I thought it would make my work situation unpleasant because I'd be labeled a trouble maker. To a very large extent, to a large extent, to a moderate extent, to a small extent, or not at all?  
Very large extent=1, Large extent=2, Moderate extent=3, Small extent=4, Not at all=5,  
Not sure=8, Refused=9

131. (b) I did not want to hurt the person or people who bothered me. To a very large extent, to a large extent, to a moderate extent, to a small extent, or not at all?  
Very large extent=1, Large extent=2, Moderate extent=3, Small extent=4, Not at all=5,  
Not sure=8, Refused=9

132. (b) I did not think it was that important. To a very large extent, to a large extent, to a moderate extent, to a small extent, or not at all?  
Very large extent=1, Large extent=2, Moderate extent=3, Small extent=4, Not at all=5,  
Not sure=8, Refused=9

133. (IF RESPONDED THAT IT WAS A SINGLE EVENT IN Q.44, SKIP TO Q.138) I am going to name some actions you may have taken besides reporting it. Please tell me if you took the action and if, it made things better, made things worse, or made no difference for you?

Did you ignore the behavior? Yes, and it made things better; yes, but it made no difference; yes, and it made things worse; or no, you did not do this.

Yes, and it made things better=1; Yes, but it made no difference=2; Yes, and it made things worse=3; No, did not do this=4

Not sure=8,

Refused=9

134. DELETE

135. Did you ask or tell the person or people to stop, either orally or in writing? Yes, and it made things better; yes, but it made no difference; yes, and it made things worse; or no, you did not do this.

Yes, and it made things better=1; Yes, but it made no difference=2; Yes, and it made things worse=3; No, did not do this=4

Not sure=8

Refused=9

136. Did you go along with persons' behavior or advances? Yes, and it made things better; yes, but it made no difference; yes, and it made things worse; or no, you did not do this.

Yes, and it made things better=1; Yes, but it made no difference=2; Yes, and it made things worse=3; No, did not do this=4

Not sure=8

Refused=9

137. DELETE

138. Did you request a transfer or temporary assignment elsewhere? Yes, and it made things better; yes, but it made no difference; yes, and it made things worse; or no, you did not do this.

Yes, and it made things better=1; Yes, but it made no difference=2; Yes, and it made things worse=3; No, I did not do this=4

Not sure=8

Refused=9

138B. Did you request a discharge from the Reserves due to this situation? Yes, and it made things better; yes, but it made no difference; yes, and it made things worse; or no, you did not do this.

Yes, and it made things better=1; Yes, but it made no difference=2; Yes, and it made things worse=3; No, I did not do this=4

Not sure=8

Refused=9

139. DELETE

140. Did you informally request advice or assistance from other base or post sources, such as the chaplain or counselors? Yes, and it made things better; yes, but it made no difference; yes, and it made things worse; or no, you did not do this.

Yes, and it made things better=1; Yes, but it made no difference=2; Yes, and it made things worse=3; No, I did not do this=4

Not sure=8

Refused=9

141. While this was happening, did you try to get emotional support from friends and relatives?  
 Yes, and it made things better; yes, but it made no difference; yes, and it made things worse; or no, you did not do this.  
 Yes, and it made things better=1; Yes, but it made no difference=2; Yes, and it made things worse=3; No, I did not do this=4; Not sure=8; Refused=9
142. While this was happening, did you let out or vent the emotions that that you were having about the situation? Yes, and it made things better; yes, but it made no difference; yes, and it made things worse; or no, you did not do this.  
 Yes, and it made things better=1; Yes, but it made no difference=2; Yes, and it made things worse=3; No, I did not do this=4  
 Not sure=8  
 Refused=9
143. DELETE )
144. DELETE
145. DELETE
146. DELETE
147. DELETE
148. DELETE
149. To what extent do you consider any of the situations to have been sexual harassment?  
 Please respond, definitely not, probably not, uncertain, probably was, or definitely was.  
 Definitely was not sexual harassment=1  
 Probably was not sexual harassment=2  
 Uncertain=3  
 Probably was sexual harassment=4  
 Definitely was sexual harassment=5

Now I'm going to ask you a few questions about medical care you may have received after this situation.

(ASK Q.150 AND Q.151 IF ANSWERED "YES" TO AT LEAST ONE OF Qs 23 or 24 (2,3,4,5=yes), 32, 34, 36, 38, or 40.)

150. Did you seek medical care for this situation within a few months of when it happened?  
 Yes=1  
 No=2 (SKIP TO Q152)  
 Not sure=8 (SKIP TO Q152)  
 Refused=9 (SKIP TO Q152)
151. Did you go to an Emergency Room or to a medical doctor?  
 Emergency Room=1  
 Medical doctor=2  
 Not sure=8  
 Refused=9

152. Did you see a mental health provider or clergyman or attend a support group within a few months of the situation?  
 Mental health provider=1  
 Support group=2  
 Both=3  
 Neither=4 (SKIP TO Q154)  
 Not sure=8 (SKIP TO Q154)  
 Refused=9 (SKIP TO Q154)
153. Was this for help in coping with the situation?  
 Yes=1  
 No=2  
 Refused=8  
 Not sure=9
154. Other than during the first few months following the situation, have you seen a mental health provider or clergyman or attended a support group for help in coping with the situation?  
 Yes=1  
 No=2 (SKIP TO Q.158)  
 Refused=8 (SKIP TO Q.158)  
 Not sure=9 (SKIP TO Q.158)
155. Approximately how long ago was the most recent time that you got help for coping with the situation? \_\_\_\_\_ months \_\_\_\_\_ years  
 GAVE ANSWERS IN MONTHS=1 OR YEARS=2, NS=3 REF=4  
 MONTHS - RANGE 1-36  
 YEARS - RANGE 1-10, 10=10 OR MORE YEARS
156. How many times did you see a mental health provider or clergyman/attend a support group related to the situation? Once, two to six times, six to twelve times, twelve to twenty-four times, or more than twenty-four times.  
 Once=1  
 Two to six times=2  
 Six to twelve times=3  
 Twelve to twenty-four times=4  
 More than twenty-four times=5  
 Refused=8  
 Not sure=9
- (MOVE F157 BEFORE F155)
157. Are you currently seeing a mental health provider or clergyman or attending a support group for help in coping with the situation?  
 Yes=1 (SKIP TO F156)  
 No=2 (CONTINUE TO F155)  
 Refused=8 (SKIP TO 156)  
 Not sure=9 (SKIP TO 156)
158. Have you ever tried to receive counseling in a VA hospital or clinic for this situation or a similar situation?  
 Yes=1  
 No=2  
 Not sure=8  
 Refused=9

159. Did you actually receive counseling in a VA hospital or clinic for this situation or a similar situation?

Yes=1

No=2

Not sure=8

Refused=9

#### Section G

Next I will ask you some questions about health insurance and about health services you may have used in the past.

1. Are you currently working at a job for pay?

Currently working for pay=1 (SKIP TO Q.3)

Working periodically=2 (SKIP TO Q.3)

Not working=3

Not sure=8

refused = 9 (SKIP TO Q3)

2. Are you on sick or disability leave from a job or are you not employed now?

On sick/disability leave=1

Not employed=2

Not sure=8

Refused=9

3. Are you currently covered by TRICARE Prime, TRICARE Standard, or CHAMPVA health insurance? (IF THE PARTICIPANT ASKS WHAT THESE ARE, REPLY, "These are Department of Defense health care programs for current and retired members of the uniformed services and their families.")

Yes=1 continue

No=2 continue

Not sure=8 continue

Refused=9 (SKIP TO SECTION H)

4. Do you currently have other health insurance, or Medicare, Medigap, or Medicaid coverage? (IF NEEDED) (Just to clarify, medicare is a federally funded insurance program for disabled or elderly people. Medigap is private insurance that supplements Medicare. Medicaid is a public health insurance program run by the state for people whose household income and assets are below a certain level).

Yes=1 (SKIP TO 6)

No=2 continue if said "no" to Q3 and 4. If said "yes" to either, SKIP to 6

Not sure=8 (4b PROBE: IF YOU HAVE TO GO TO HOSPITAL, HOW DO YOU PAY?)

Refused=9 (SKIP TO SECTION H)

5. How long have you been without health insurance?

\_\_\_\_\_ months \_\_\_\_\_ years (SKIP TO 8)

GAVE ANSWERS IN MONTHS=1 OR YEARS=2, NS=3 REF=4

MONTHS - RANGE 1-36

YEARS - RANGE 1-20, 20=20 OR MORE YEARS



6. What type of coverage do you have? \_ (READ AND INDICATE ALL THAT APPLY)

Private insurance=1  
Medicare=2 (SKIP TO 8)  
Medigap=3 (SKIP TO 8)  
Medicaid=4 (SKIP TO 8)  
VA hospital benefits=5 (SKIP TO 8)  
Not sure=8  
Refused=9 (SKIP TO 8)

7. Who pays for your private insurance? (INDICATE ALL THAT APPLY)

Self=1  
Current employer=2  
Former employer=3  
Someone else=4  
Not sure=8  
Refused=9

The next several questions will be asking you about health care you have received during the last three months, since \_\_\_\_ (INSERT NAME OF MONTH.) People often have personal or emotional problems and sometimes they go someplace for help. So in addition to asking you about help you may have gotten for medical problems, I'll be asking you what kind of help you may have gotten for personal or emotional problems too.

8. (DELETE )

9. During the past three months, how many different times did you go to a hospital emergency room for emergency care? Please include any visits to an emergency room, whether or not you were admitted to the hospital. Also include visits to the emergency rooms of psychiatric hospitals. \_\_\_\_\_ [IF REF, SKIP TO 11] (RANGE=1-50, 98=NS, 99=REF)

10. Which of these was the main reason you went to the emergency room? Was it a physical problem, an injury due to an accident or an assault, an emotional problem, an overdose on drugs or alcohol, or some other reason? (NOTE: IF HAD MORE THAN ONE EMERGENCY ROOM VISIT DURING THE LAST THREE MONTHS, ASK ONLY ABOUT THE MOST RECENT.)

physical problem=1  
injury due to an accident or an assault=2  
emotional health problem=3  
overdose on drugs or alcohol=4  
other=5 (PLEASE SPECIFY) \_\_\_\_\_  
Not sure=8  
Refused=9

11. DELETE

12. During the past three months, how many separate overnight hospital stays did you have, including psychiatric hospital stays? Please include hospital stays that began with an emergency room visit you mentioned above. \_\_\_\_\_ (RANGE=1-50, 98=NS, 99=REF)

13. (ASK ONLY OF WOMEN) Were any of these hospital stays for the delivery of a baby?

Yes=1

No=2

Not sure=8

Refused=9

14. Which of these was the main reason you entered the hospital. (NOTE: IF HAD MORE THAN ONE HOSPITAL STAY DURING THE LAST THREE MONTHS, ASK ONLY ABOUT THE MOST RECENT.) Was it a physical problem, an injury due to an accident or an assault, an emotional problem, an overdose on drugs or alcohol, or some other reason?

physical problem=1

injury due to an accident or an assault=2

emotional health problem=3

overdose on drugs or alcohol=4

other=5 (PLEASE SPECIFY) \_\_\_\_\_

not sure=8

refused=9

15. During the past three months, did you spend one or more nights in a residential drug or alcohol treatment facility or detox hospital?

Yes=1

No=2 [SKIP TO 17]

Not sure=8 [SKIP TO 17]

Refused=9 [SKIP TO 17]

16. During the past three months, how many separate stays did you have? \_\_\_\_\_ (RANGE=1-50, 98=NS, 99=REF)

17. DELETE

The rest of the questions are about outpatient care you may have received at various places, such as hospital outpatient clinics and private doctors offices. Please listen carefully to each question because I'll be asking you if you have gotten care in a variety of different settings.

18. During the past three months, how many different hospital clinics or outpatient departments, clinics that are not part of hospitals, and private doctors' offices did you visit for medical care? \_\_\_\_\_ (RANGE=1-50, 98=NS, 99=REF) (THESE ARE OUTPATIENT VISITS.)

19. During the past three months, how many times did you visit this (these) clinic(s)? (NOTE: ANSWER SHOULD BE SUM TOTAL OF ALL VISITS TO ALL HOSPITAL CLINICS OR OUTPATIENT DEPARTMENTS CLINICS THAT ARE NOT PART OF HOSPITALS, AND PRIVATE DOCTORS' OFFICES.) \_\_\_\_\_ (RANGE=1-50, 98=NS, 99=REF)

20. In addition to the medical care you received during these visits, did you get any mental health services from your medical care provider, for example, prescriptions for treating emotional problems?

Yes=1

No=2

Not sure=8

Refused=9

21. DELETE

22. DELETE

23. DELETE

24. DELETE

25. DELETE

26. DELETE

27. DELETE

28. DELETE

29. During the past three months, did you see any professional for help with an emotional problem other than what you've already told me about? These professionals could be psychologists, therapists, counselors, psychiatrists or other doctors and could include groups led by professional counselors and visits for medication for emotional problems. .

Yes=1

No=2 (SKIP TO 34)

Not sure=8 (SKIP TO 34)

Refused=9 (SKIP TO 34)

30. During the past three months, how many different places that provide mental health care did you visit to talk to a professional about emotional issues? Please include places offering individual and group therapy, and places where you can get medications for an emotional problem? \_\_\_\_\_ (RANGE=1-50, 98=NS, 99=REF)

31. During the past three months, how many times did you meet one-on-one with a staff member there to talk about emotional issues? \_\_\_\_\_ (RANGE=0-50, 98=NS, 99=REF)

32. In addition to these one-on-one counseling sessions, how many times did you meet with a professional to discuss your use of prescribed medications for emotional issues? \_\_\_\_\_

(RANGE=0-50, 98=NS, 99=REF) (THE TIME PERIOD IS STILL THE PAST THREE MONTHS)

33. How many times did you meet with other people there in a group led by a staff member to talk about emotional issues? \_\_\_\_\_ (RANGE=0-50, 98=NS, 99=REF) (THE TIME PERIOD IS STILL THE PAST THREE MONTHS)

34. During the past three months, did you get help for an alcohol or drug problem in a clinic or outpatient program? ( This includes methadone maintenance but does not include services that were delivered by unpaid professionals, such as clergy or other religious or spiritual advisors or healers).

Yes=1

No=2 (SKIP TO 36)

Not sure=8 (SKIP TO 36)

Refused=9 (SKIP TO 36)

35. During the past three months, how many different places that provide outpatient alcohol or drug treatment did you visit for treatment? \_\_\_\_\_ (RANGE=1-50, 98=NS, 99=REF)

36. During the past three months, did you participate in any support group, group counseling or self-help group for emotional, substance abuse or health issues, other than what you've already told me about? (THIS WOULD INCLUDE GROUPS LED BY AN UNPAID PROFESSIONAL, FOR EXAMPLE CLERGY, AND 12 STEP MEETINGS SUCH AS AA.)

Yes=1

No=2 (SKIP TO 39)

Not sure=8 (SKIP TO 39)

Refused=9 (SKIP TO 39)

37. During the past three months, how many different self-help or support groups did you participate in? \_\_\_\_\_ (RANGE=1-50, 98=NS, 99=REF)

38. During the past three months, how many times did you attend meetings? \_\_\_\_\_ (RANGE=1-100, 98=NS, 99=REF)

39. During the past three months, did you receive any help because of a health problem or other disability from family members, friends, or neighbors? (This help could be for medical problems, taking care of yourself, housekeeping, shopping, or any other assistance you might need, including transportation). (INCLUDE ALL INFORMAL CARE, WHETHER OR NOT RESPONDENT CONSIDERS IT TO BE MEDICALLY NECESSARY. DO NOT INCLUDE MONEY.)

Yes=1

No=2

Not sure=8,      Refused=9

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40. During the past three months, did you receive any health care from providers or social service agencies we have not yet discussed?

Yes=1 [PROBE FOR THE TYPE OF HEALTH CARE RECEIVED, SPECIFY:

\_\_\_\_\_]

No=2 (SKIP TO Q41)

Not sure=8 (SKIP TO Q41)

Refused=9 (SKIP TO Q41)

40B. During the past three months, how many times did you visit this (these) provider(s) or agenc(y/ies)?

\_\_\_\_\_(RANGE=1-50, 98=NS, 99=REF)

41. During the past three months, did you ever try to get health services and found you were unable to get them?

Yes=1

No=2 (SKIP TO 44)

Not sure=8 (SKIP TO 44)

Refused=9 (SKIP TO 44)

42. Which of the following services were you unable to get? \_\_\_\_\_ (SPECIFY AND CODE ACCORDING TO THE LIST BELOW. MAY INDICATE MORE THAN ONE.)

Outpatient mental health services=1

Inpatient mental health services=2

Detox or inpatient drug and alcohol treatment=3

Outpatient drug and alcohol treatment=4

General medical health services=5

Emergency care=6

Specialty medical services, such as gynecological care, prenatal care, letteriac care=7

[PLEASE SPECIFY] \_\_\_\_\_

Not sure=8

Refused=9

43. What was the reason(s) you could not get these services? \_\_\_\_\_ (SPECIFY AND CODE ACCORDING TO THE LIST BELOW.)

Medical provider(s) did not take my insurance=1

Would not be seen because I did not have insurance=2

Did not have the money to pay for services or my co-pay=3

Provider was not taking new patients=4

No provider in my area for my problem=5

Did not have transportation=6

Other=7 (PLEASE SPECIFY) \_\_\_\_\_

Not sure=8

Refused=9

44. (If said "yes" to section F Q.158, program 'yes' and skip to Q.45) Have you ever tried to receive care in a VA hospital or clinic?

Yes=1

No=2 (SKIP TO 46)

Not sure=8 (SKIP TO 46)

Refused=9 (SKIP TO 46)

45. (If said "yes" to section F Q.159, program 'yes' and skip to Q.46) Did you actually receive care in a VA hospital or clinic?

No=2

Yes=1

Not sure=8

Refused=9

46. If you needed care in the future, would you consider using VA care if it were available?

Yes=1

No=2

Not sure=8

Refused=9

#### Section I

I will now read you a list of statements that may or may not describe how you have felt or behaved in the past week. Please listen to each one carefully, then decide how often you felt or behaved that way in the past week.

During the past week...

1. I felt depressed. None of the time to less than one day, one to two days, three to four days, or five to seven days?  
None of the time to less than one day=1, one to two days=2, three to four days=3, or five to seven days=4.
2. I felt that everything I did was an effort. None of the time to less than one day, one to two days, three to four days, or five to seven days? None of the time to less than one day=1, one to two days=2, three to four days=3, or five to seven days=4.
3. My sleep was restless. None of the time to less than one day, one to two days, three to four days, or five to seven days?  
None of the time to less than one day=1, one to two days=2, three to four days=3, or five to seven days=4.
4. I was happy. None of the time to less than one day, one to two days, three to four days, or five to seven days?  
None of the time to less than one day=1, one to two days=2, three to four days=3, or five to seven days=4.
5. I felt lonely. None of the time to less than one day, one to two days, three to four days, or five to seven days?  
None of the time to less than one day=1, one to two days=2, three to four days=3, or five to seven days=4.
6. People were unfriendly. None of the time to less than one day, one to two days, three to four days, or five to seven days?  
None of the time to less than one day=1, one to two days=2, three to four days=3, or five to seven days=4.
7. I enjoyed life. None of the time to less than one day, one to two days, three to four days, or five to seven days?  
None of the time to less than one day=1, one to two days=2, three to four days=3, or five to seven days=4.
8. I felt sad. None of the time to less than one day, one to two days, three to four days, or five to seven days?  
None of the time to less than one day=1, one to two days=2, three to four days=3, or five to seven days=4.
9. I felt that people disliked me. None of the time to less than one day, one to two days, three to four days, or five to seven days?  
None of the time to less than one day=1, one to two days=2, three to four days=3, or five to seven days=4.

10. I could not get "going" . None of the time to less than one day, one to two days, three to four days, or five to seven days?  
None of the time to less than one day=1, one to two days=2, three to four days=3, or five to seven days=4.

#### Section J

Now I'm going to ask you some questions about your use of alcoholic beverages during this past year. Because alcohol use can affect many areas of your health, it is important for us to know how much you usually drink and whether you have experienced any problems with your drinking. Please be as honest and accurate as you can be. By alcoholic beverage we mean beer, wine, whiskey, vodka, etc. and one drink equals one bottle of beer, one glass of wine, one mixed drink or one shot.

1. How often do you have a drink containing alcohol? Never, monthly or less, two to four times a month, two to three times a week, or four or more times a week?

never=1 (SKIP TO Q.9 )  
monthly or less=2  
two to four times a month=3  
two to three times a week=4  
four or more times a week=5  
Not sure=8  
Refused=9

2. How many drinks containing alcohol do you have on a typical day when you are drinking? One or two, three or four, five or six, seven to nine, or ten or more?

1 or 2=1  
3 or 4=2  
5 or 6=3  
7 to 9=4  
10 or more=5  
Not sure=8  
Refused=9

3. How often do you have six or more drinks on one occasion? Never, less than monthly, monthly, weekly, or daily or almost daily?

never=1 (IF ANSWERED ONE OR TWO ON Q2 AND NEVER ON Q3, SKIP TO Q9)  
less than monthly=2  
monthly=3  
weekly=4  
daily or almost daily=5  
Not sure=8  
Refused=9

4. How often during the last year have you found that you were not able to stop drinking once you had started? Never, less than monthly, monthly, weekly, or daily or almost daily?

never=1  
less than monthly=2  
monthly=3  
weekly=4  
daily or almost daily=5  
Not sure=8  
Refused=9

5. How often during the last year have you failed to do what was normally expected from you because of drinking? Never, less than monthly, monthly, weekly, or daily or almost daily?
- never=1
  - less than monthly=2
  - monthly=3
  - weekly=4
  - daily or almost daily=5
  - Not sure=8
  - Refused=9
6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session? Never, less than monthly, monthly, weekly, or daily or almost daily?
- never=1
  - less than monthly=2
  - monthly=3
  - weekly=4
  - daily or almost daily=5
  - Not sure=8
  - Refused=9
7. How often during the last year have you had a feeling of guilt or remorse after drinking? Never, less than monthly, monthly, weekly, or daily or almost daily?
- never=1
  - less than monthly=2
  - monthly=3
  - weekly=4
  - daily or almost daily=5
  - Not sure=8
  - Refused=9
8. How often during the last year have you been unable to remember what happened the night before because you had been drinking? Never, less than monthly, monthly, weekly, or daily or almost daily?
- never=1
  - less than monthly=2
  - monthly=3
  - weekly=4
  - daily or almost daily=5
  - Not sure=8
  - Refused=9
9. Have you or someone else been injured as a result of your drinking? No; yes, but not in the last year; or yes, during the last year?
- No=1
  - Yes, but not in the last year=2
  - Yes, during the last year=3
  - Not sure=8
  - Refused=9



10. Has a relative or friend, or a doctor or another health worker, been concerned about your drinking or suggested you cut down? No; yes, but not in the last year; or yes, during the last year?
- No=1  
 Yes, but not in the last year=2  
 Yes, during the last year=3  
 Not sure=8  
 Refused=9

## SECTION K

(SECTION K IS ONLY TO BE ASKED OF PARTICIPANTS WHO DO NOT REPORT ANY OF THE EXPERIENCES ASKED ABOUT IN SECTION F, Qs 1-32, 34, 36, 38, or 40.)

I will now read you a list of statements that may or may not describe beliefs or attitudes that you have about women's abilities as they relate to military service. Please note that the items are not intended to assess attitudes about women who are in the military, but attitudes about women **in general**. Please listen to each statement carefully, then decide how much you agree or disagree with each statement.

(randomly order questions 1-26 and questions 27-46)

1. Most women lack the physical strength needed to be in the military. Do you strongly disagree, somewhat disagree, neither agree nor disagree, somewhat agree, strongly agree?  
 Strongly disagree=1, Somewhat disagree=2, Neither agree nor disagree=3, Somewhat agree=4  
 Strongly agree=5  
 Not sure=8, Refused=9
2. DELETE
3. DELETE
4. Men's greater strength makes them better soldiers than women. Do you strongly disagree, somewhat disagree, neither agree nor disagree, somewhat agree, strongly agree?  
 Strongly disagree=1, Somewhat disagree=2, Neither agree nor disagree=3, Somewhat agree=4  
 Strongly agree=5  
 Not sure=8, Refused=9
5. DELETE
6. Most men are more suited to leadership roles than most women. Do you strongly disagree, somewhat disagree, neither agree nor disagree, somewhat agree, strongly agree?  
 Strongly disagree=1, Somewhat disagree=2, Neither agree nor disagree=3, Somewhat agree=4  
 Strongly agree=5  
 Not sure=8, Refused=9
7. Women possess the leadership skills necessary to command soldiers in the military. Do you strongly disagree, somewhat disagree, neither agree nor disagree, somewhat agree, strongly agree?  
 Strongly disagree=1, Somewhat disagree=2, Neither agree nor disagree=3, Somewhat agree=4  
 Strongly agree=5  
 Not sure=8, Refused=9
8. DELETE
9. ~~DELETE~~
10. ~~DELETE~~

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11. Women can handle stressful situations as well as men. Do you strongly disagree, somewhat disagree, neither agree nor disagree, somewhat agree, strongly agree?  
Strongly disagree=1, Somewhat disagree=2, Neither agree nor disagree=3, Somewhat agree=4  
Strongly agree=5  
Not sure=8, Refused=9

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12. Most women are too emotional to make decisions in stressful circumstances such as combat.  
Do you strongly disagree, somewhat disagree, neither agree nor disagree, somewhat agree, strongly agree?  
Strongly disagree=1  
Somewhat disagree=2  
Neither agree nor disagree=3  
Somewhat agree=4  
Strongly agree=5  
Not sure=8, Refused=9

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13. Women often let their emotions interfere with rational decision-making. Do you strongly disagree, somewhat disagree, neither agree nor disagree, somewhat agree, strongly agree?  
Strongly disagree=1  
Somewhat disagree=2  
Neither agree nor disagree=3  
Somewhat agree=4  
Strongly agree=5  
Not sure=8, Refused=9

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14. DELETE

15. A woman is no more likely to crack under the pressure of warfare than a man. Do you strongly disagree, somewhat disagree, neither agree nor disagree, somewhat agree, strongly agree?  
Strongly disagree=1  
Somewhat disagree=2  
Neither agree nor disagree=3  
Somewhat agree=4  
Strongly agree=5  
Not sure=8, Refused=9

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16. Men are better able to handle the hardships of war than women.  
Strongly disagree=1  
Somewhat disagree=2  
Neither agree nor disagree=3  
Somewhat agree=4  
Strongly agree=5  
Not sure=8, Refused=9

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17. Most women lack the courage that is necessary to be a soldier.  
Strongly disagree=1  
Somewhat disagree=2  
Neither agree nor disagree=3  
Somewhat agree=4  
Strongly agree=5  
Not sure=8, Refused=9

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19. Most women can manage their fear as well as most men.

Strongly disagree=1

Somewhat disagree=2

Neither agree nor disagree=3

Somewhat agree=4

Strongly agree=5

Not sure=8, Refused=9

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20. ~~DELETE~~

21. ~~DELETE~~.

22. ~~DELETE~~

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23. Women possess the self-discipline that is needed to be a soldier.

Strongly disagree=1

Somewhat disagree=2

Neither agree nor disagree=3

Somewhat agree=4

Strongly agree=5

Not sure=8, Refused=9

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24. Most women would be willing to play by the rules in the military.

Strongly disagree=1

Somewhat disagree=2

Neither agree nor disagree=3

Somewhat agree=4

Strongly agree=5

Not sure=8, Refused=9

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25. Women are as capable as men in carrying out assignments and responsibilities in the military.

Strongly disagree=1

Somewhat disagree=2

Neither agree nor disagree=3

Somewhat agree=4

Strongly agree=5

Not sure=8, Refused=9

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26. Most women possess the commitment that is needed to be in the military.

Strongly disagree=1

Somewhat disagree=2

Neither agree nor disagree=3

Somewhat agree=4

Strongly agree=5

Not sure=8, Refused=9

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The next set of statements that I will read describe attitudes regarding women in the military. Please note that this set of items is intended to assess attitudes about women in the military, rather than beliefs about women in general.

27. Men and women can work well together in the military. Do you strongly disagree, somewhat disagree, neither agree nor disagree, somewhat agree, strongly agree?

Strongly disagree=1

Somewhat disagree=2

Neither agree nor disagree=3

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Somewhat agree=4  
Strongly agree=5  
Not sure=8, Refused=9

| 28. Female soldiers perform as well as men in all aspects of the military.

Strongly disagree=1  
Somewhat disagree=2  
Neither agree nor disagree=3  
Somewhat agree=4  
Strongly agree=5  
Not sure=8, Refused=9

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| 29. Women have as much to offer in the military service of their country as men.

Strongly disagree=1  
Somewhat disagree=2  
Neither agree nor disagree=3  
Somewhat agree=4  
Strongly agree=5  
Not sure=8, Refused=9

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| 30. Having women in the military improves military performance.

Strongly disagree=1  
Somewhat disagree=2  
Neither agree nor disagree=3  
Somewhat agree=4  
Strongly agree=5  
Not sure=8, Refused=9

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| 31. DELETE

| 32. Having women in the military is a distraction for men.

Strongly disagree=1  
Somewhat disagree=2  
Neither agree nor disagree=3  
Somewhat agree=4  
Strongly agree=5  
Not sure=8, Refused=9

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| 33. Men are better suited than women to engage in combat.

Strongly disagree=1  
Somewhat disagree=2  
Neither agree nor disagree=3  
Somewhat agree=4  
Strongly agree=5  
Not sure=8, Refused=9

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| 34. Women in the military should not be assigned to combat duty.

Strongly disagree=1  
Somewhat disagree=2  
Neither agree nor disagree=3  
Somewhat agree=4  
Strongly agree=5  
Not sure=8, Refused=9

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| 35. Women in the military perform as well as men in combat situations.

Strongly disagree=1

Somewhat disagree=2

Neither agree nor disagree=3

Somewhat agree=4

Strongly agree=5

Not sure=8, Refused=9

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| 36. Combat positions should be reserved for men.

Strongly disagree=1

Somewhat disagree=2

Neither agree nor disagree=3

Somewhat agree=4

Strongly agree=5

Not sure=8, Refused=9

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| 37. Women are as effective in military leadership roles as men.

Strongly disagree=1

Somewhat disagree=2

Neither agree nor disagree=3

Somewhat agree=4

Strongly agree=5

Not sure=8, Refused=9

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| 38. Having women as commanding officers improves military performance.

Strongly disagree=1

Somewhat disagree=2

Neither agree nor disagree=3

Somewhat agree=4

Strongly agree=5

Not sure=8, Refused=9

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| 39. Most women in the military are competent leaders.

Strongly disagree=1

Somewhat disagree=2

Neither agree nor disagree=3

Somewhat agree=4

Strongly agree=5

Not sure=8, Refused=9

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| 40. DELETE

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| 41. DELETE

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| 42. DELETE

| 43. It should not be a problem if women become pregnant while in the military.

Strongly disagree=1

Somewhat disagree=2

Neither agree nor disagree=3

Somewhat agree=4

Strongly agree=5

Not sure=8, Refused=9

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| 44. Being a parent should not be an obstacle for a woman who wants a military career.

Strongly disagree=1

Somewhat disagree=2

Neither agree nor disagree=3

Somewhat agree=4

Strongly agree=5

Not sure=8, Refused=9

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| 45. In times of war, military women who are mothers should not be allowed to take assignments  
that place them under physical threat.

Strongly disagree=1

Somewhat disagree=2

Neither agree nor disagree=3

Somewhat agree=4

Strongly agree=5

Not sure=8, Refused=9

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| 46. DELETE

The next set of statements refers to attitudes and beliefs regarding gender issues in the workplace and in other settings. The response choices are again: strongly disagree, somewhat disagree, neither agree nor disagree, somewhat agree, strongly agree

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| 47. Most women who are sexually assaulted by a man provoke his behavior by the way they talk,  
act, or dress.

Strongly disagree=1

Somewhat disagree=2

Neither agree nor disagree=3

Somewhat agree=4

Strongly agree=5

Not sure=8, Refused=9

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| 48. An attractive woman has to expect sexual advances and should learn how to handle them.

Strongly disagree=1

Somewhat disagree=2

Neither agree nor disagree=3

Somewhat agree=4

Strongly agree=5

Not sure=8, Refused=9

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| 49. Most men are sexually teased by many of the women with who they interact on the job.

Strongly disagree=1

Somewhat disagree=2

Neither agree nor disagree=3

Somewhat agree=4

Strongly agree=5

Not sure=8, Refused=9

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50. A man must learn to understand that a woman's "no" to his sexual advances really means "no." \*  
 Strongly disagree=1  
 Somewhat disagree=2  
 Neither agree nor disagree=3  
 Somewhat agree=4  
 Strongly agree=5  
 Not sure=8, Refused=9
51. It is only natural for a woman to use her sexuality as a way of getting ahead in school or at work.  
 Strongly disagree=1  
 Somewhat disagree=2  
 Neither agree nor disagree=3  
 Somewhat agree=4  
 Strongly agree=5  
 Not sure=8, Refused=9
52. An attractive man has to expect sexual advances and should learn how to handle them.  
 Strongly disagree=1  
 Somewhat disagree=2  
 Neither agree nor disagree=3  
 Somewhat agree=4  
 Strongly agree=5  
 Not sure=8, Refused=9
53. I believe that sexual intimidation is a serious social problem.  
 Strongly disagree=1  
 Somewhat disagree=2  
 Neither agree nor disagree=3  
 Somewhat agree=4  
 Strongly agree=5  
 Not sure=8, Refused=9
54. It is only natural for a man to make sexual advances to a woman he finds attractive.  
 Strongly disagree=1  
 Somewhat disagree=2  
 Neither agree nor disagree=3  
 Somewhat agree=4  
 Strongly agree=5  
 Not sure=8, Refused=9
55. Innocent flirtations make the workday more interesting.  
 Strongly disagree=1  
 Somewhat disagree=2  
 Neither agree nor disagree=3  
 Somewhat agree=4  
 Strongly agree=5  
 Not sure=8, Refused=9
56. Encouraging a supervisor's sexual interest is frequently used by women to improve their work situation.  
 Strongly disagree=1  
 Somewhat disagree=2  
 Neither agree nor disagree=3
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Somewhat agree=4  
Strongly agree=5  
Not sure=8, Refused=9

57. Sexual harassment is a problem in the military.

Strongly disagree=1  
Somewhat disagree=2  
Neither agree nor disagree=3  
Somewhat agree=4  
Strongly agree=5  
Not sure=8, Refused=9

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58. People who claim that sexual harassment is a problem in the military are exaggerating.

Strongly disagree=1  
Somewhat disagree=2  
Neither agree nor disagree=3  
Somewhat agree=4  
Strongly agree=5  
Not sure=8, Refused=9

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59. In most cases, sexual harassment doesn't really harm anyone.

Strongly disagree=1  
Somewhat disagree=2  
Neither agree nor disagree=3  
Somewhat agree=4  
Strongly agree=5  
Not sure=8, Refused=9

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60. Most complaints of sexual harassment in the military are false or made up accusations.

Strongly disagree=1  
Somewhat disagree=2  
Neither agree nor disagree=3  
Somewhat agree=4  
Strongly agree=5  
Not sure=8, Refused=9

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61. Women who complain of sexual harassment have often provoked such incidents by their own appearance or conduct.

Strongly disagree=1  
Somewhat disagree=2  
Neither agree nor disagree=3  
Somewhat agree=4  
Strongly agree=5  
Not sure=8, Refused=9

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#### Section L

I just have a few more questions to ask you.

1. What year were you born? \_\_\_\_ (range 1920-1985)  
Not sure=1988, refused=1999



2. I am going to name some racial categories and I'd like you to tell me what race you consider yourself to be? White, Black or African-American, Hispanic or Latino, American Indian or Alaska Native, Asian or Pacific Islander, or biracial?
- White=1
  - Black or African-American=2
  - Hispanic or Latino=3
  - American Indian or Alaska Native=4
  - Asian or Pacific Islander=5
  - Biracial=6
  - Not sure=8
  - Refused=9
3. How much education have you completed? (IF RESPONDS THAT THEY WENT TO COLLEGE, ASK IF THEY HAVE A DEGREE AND IF IT IS A TWO OR A FOUR YEAR DEGREE TO ALLOW FOR PROPER CLASSIFICATION)
- 8<sup>th</sup> grade or less=1
  - Some high school=2
  - GED or other high school equivalency certificate=3
  - High school graduate=4
  - Vocational or technical training=5
  - Some college but no degree=6
  - Two-year college graduate=7
  - Four-year college graduate=8
  - Some graduate or professional school=9
  - Graduate or professional degree=10
  - Not sure=8
  - Refused=9
4. What is your current marital status? (IF RESPONDS "SINGLE", ASK "NEVER MARRIED?")
- Married=1
  - Living as a couple=2
  - Separated=3
  - Divorced=4
  - Widowed=5
  - Single/Never married=6
  - Not sure=8
  - Refused=9

5. I am going to name you a list of income categories. Which category represents the total combined income during the past 12 months of all the members in your household?  
(Please include money from jobs, net income from business, farm or rent, pensions, dividends, interest, social security payments and any other household income received).  
(IF LIVES WITH A ROOMMATE(S) AND INCOMES ARE KEPT SEPARATE, HAVE THEM REPORT ONLY THEIR OWN INCOME) Less than \$5000, \$5000 to less than \$15,000, \$15,000 to less than \$25,000, \$25,000 to less than \$35,000, \$35,000 to less than \$45,000, \$45,000 to less than \$55,000, \$55,000 to less than \$65,000, \$65,000 to less than \$75,000, \$75,000 to less than \$85,000, \$85,000 to less than \$95,000, or over \$95,000?

Less than \$5000=1

\$5000 to less than \$15,000 =2

\$15,000 to less than \$25,000 =3

\$25,000 to less than \$35,000 =4

\$35,000 to less than \$45,000 =5

\$45,000 to less than \$55,000 =6

\$55,000 to less than \$65,000 =7

\$65,000 to less than \$75,000 =8

\$75,000 to less than \$85,000 =9

\$85,000 to less than \$95,000 =10

Over \$95,000=11

Not sure=8 (SAY "CAN YOU MAKE A FAIRLY ACCURATE GUESS?")

Refused=9

6. How many people are there currently living in your household? \_\_\_\_\_ (range 1-10)  
10 or more=10, Not sure=12  
Refused=13

7. Do you have any children?

Yes=1

No=2 (SKIP TO Q10)

Not sure=8 (SKIP TO Q11)

Refused=9 (SKIP TO Q11)

8. How many children do you have? \_\_\_\_\_  
10 or more=10, Not sure=12  
Refused=13

9. How many of children under the age of 18 live with you? \_\_\_\_\_ (INCLUDE STEP-CHILDREN, GRANDCHILDREN, AND OTHER DEPENDENTS)  
0-9, 10 or more=10, Not sure=12  
Refused=13

10. DELETE

11. Please tell me which of the following best describes the training you received on topics related to sexual harassment during the last year you were in the Reserves/National Guard (READ IN). Did not receive any information regarding this issue and never had any formal training, received pamphlets or training materials but never had any formal training, less than one hour of training, one to four hours of training, four to eight hours of training, or one day or more of training?

No training and did not receive any information regarding this issue=1 (SKIP Q12)

Received pamphlets/training materials but never had any formal training=2

Less than one hour=3

One to four hours=4

Four to eight hours=5

One day or more=6

Not sure=8

Refused=9

12. During the time you were in the Reserves/National Guard(READ IN), did you get any training or information on the following topics?

a. Your Service's policies on sexual harassment? Yes=1, No=2, NS=8, Ref=9

b. Procedures for reporting sexual harassment? Yes=1, No=2, NS=8, Ref=9

c. Identifying, avoiding, and/or dealing with sexual harassment? Yes=1, No=2, NS=8, Ref=9

d. Legal and career consequences for those who do not comply with sexual harassment policies? Yes=1, No=2, NS=8, Ref=9

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#### Section M

1. That concludes the survey. Do you have any improvements to suggest regarding the survey?

Yes=1 RECORD SUGGESTIONS AND CONTINUE

No=2

Thank you for your participation and cooperation. (Your input is very valuable to the future of Reservists' health care. We hope that our findings will help to set public policy for the future. I would like to remind you that all of your answers will be held in confidence. We appreciate your time and honesty in answering these questions).

If you have any questions or concerns about this study, or if any part of this conversation has been upsetting for you, and you would like someone to talk to about this, you can contact Dr. Jane Stafford, the Principal Investigator, Monday through Friday from 9 AM to 5 PM Eastern Time at (617) 232-9500 x5995. Dr. Stafford can give you additional information about the study or provide you with information about counseling resources in your area.

2. When the study is completed, in about 9 months, we can send you a summary of the findings if you'd like. Are you interested in receiving this?

Yes=1

No=2

Thank you again for your time. Goodbye and have a nice day/night.

## **Appendix C**

### **Determination of Average Costs Underlying Projected Cost Estimates**

#### **FACTORS COMMON TO BOTH VA AND NON-VA ESTIMATES**

Cost projections combine several separate pieces of information. Essentially, the projection is the product of an estimated number of patients and an estimated average cost per patient. The estimated number of patients is determined in the same way for deriving VA and non-VA cost projections, and those estimates are presented in the text but not in this Appendix. The average costs are estimated by determining average costs over an applicable population group. The group chosen is described below. The rest of this Appendix deals with derivation of estimated average costs, whether for VA-provided care or for care delivered by non-VA providers. Derivation of the cost projections themselves is not presented in this Appendix.

Given the basic cost averages (and some additional adjustments to those averages that are described in this Appendix) and the estimated volume of patients, deriving the cost projection is relatively straightforward. However, total cost figures do appear in this Appendix. The total cost figures presented here are for total costs of care for the applicable population, VA MST patients (including women treated for PTSD). Those totals are relevant because the average costs are simply the totals divided by the number of patients for whom the costs are calculated. Other adjustments are then made to the average costs before deriving a cost projection for an estimated volume of new patients under a newly enacted benefit.

Population for Calculating Average Utilization. Estimates of VA cost per patient are derived from looking at all VA patients who receive outpatient treatment for MST: those in the three explicit VA clinic stops for MST or women's stress. The estimates of average cost also include all women receiving VA treatment for PTSD. The MST clinic stop codes are 524, 525 and 589. The PTSD stop codes are 516, 519, 540, 561, 562, 580 and 581. The estimates concentrated on costs for those receiving MST treatment in FY2000, as that gives us two years of follow-up cost and two preceding years of cost that can be used to help identify patterns over time in treatment for MST. (The estimates include both inpatient and outpatient care for these patients.) Costs of VA treatment were estimated separately for men and women patients because evidence from the survey suggests that men and women have very different rates of experiencing MST and different rates of seeking treatment for it. As it turns out, the average costs of treatment were sufficiently different for men and women to make it prudent to incorporate those differences in any cost projections.

The need for taking several years into consideration is evident when one considers that most MST patients usually are treated for at least several years. Table 1 shows the overall utilization patterns in FY1998 through FY2002 for VA MST patients in FY2000.

Table 1. Of VA MST Patients in FY2000, Percent with Indicated VA Inpatient or Outpatient Care in FY98-FY02.

Fiscal Year	Type of Treatment – Percentage of MST Patients with Indicated Care in Fiscal Year							
	Any VA Care	Inpatient Care			Outpatient Care			
		Any	Mental	Physical	Any	Mental	Physical	Physical Only
98	71	14	10	6	71	58	64	13
99	82	17	11	8	82	70	72	12
00	100	20	13	10	100	100		0
01	85	16	9	9	85	74	74	
02	79	15	7	10	79	73	67	

Table 2. Level of VA Outpatient Utilization, By MST, Mental, and Other, FY1998-FY2002, For VA MST Patients in FY2000

Fiscal Year	Mean Number of OP Days of Care			
	MST	Mental Health	Other	Total
98	5.0	12.2	11.4	20.9
99	6.3	14.8	13.1	24.9
00	7.7	17.5	14.5	28.4
01	6.0	14.4	12.4	24.0
02	4.5	11.9	11.9	21.5

Table 3. Level of VA Inpatient Care in FY1998-FY2002, For VA MST Patients in FY2000

Fiscal Year	Percent With IP Care			Mean Days of IP Care (If > 0)		
	Mental Health	Other	Total	Mental Health	Other	Total
98	10	6	14	29.3	6.4	35.6
99	11	8	17	25.7	7.8	33.3
00	13	10	20	25.2	6.9	32.0
01	9	9	16	23.1	8.7	31.7
02	7	10	15	12.2	11.8	23.9

These levels of VA care also form the basis for determining cost if MST care is to be provided outside VA. The same level of utilization is assumed as occurred for this FY2000 cohort of MST patients.

#### ESTIMATES OF VA AVERAGE COSTS

Source of Estimates for VA Costs. Data for estimating costs come from VA automated records for inpatient and outpatient care and episode-level costs estimated by VA Health Economics Resource Center (HERC), which can be summed across time periods to give patient-level costs for specific time periods (either a fiscal year or specific periods within or across fiscal years).

For all VA services, cost estimates are the VA national hypothetical budget amounts compiled and calculated by HERC. By taking national costs, we are standardizing the cost for each unit of service across all VA facilities. A given service provided in Portland, OR, is treated as having the same cost as for that same service in Brooklyn, NY.

For each inpatient encounter, HERC creates a record in its treating specialty file for that year. For this study, we use HERC's national VA cost for each patient encounter. HERC uses Medicare reimbursement methods as its starting point for calculating VA costs, except that HERC does not make Medicare's local market wage adjustments and does not use Medicare's global payments for surgical services. Surgical services are separated into specific amounts for each service.

For IP care, HERC distinguishes among acute medical-surgical care, non-medical-surgical acute care, and long-term care services. Long-term care services are mostly nursing home services. Non-medical-surgical care includes rehabilitation, blind rehab, spinal-cord-injury, residential rehabilitation, domiciliary, substance abuse, psychiatric care, and intermediate medicine. All other inpatient care is regarded as acute medical-surgical.

For acute medical-surgical care, HERC uses Medicare DRG weights as the starting point. It estimates a cost function using length of stay (LOS), demographic and other clinical information. Costs (hypothetical payments) are estimated for all individual encounters. For the VA national cost figures that HERC computes, the sum of these estimated costs are reconciled to national VA total costs, including local hospital overhead costs but excluding VA central office overhead costs. National VA total costs are taken from VA national Cost Distribution Reports (CDR).

For non-medical-surgical costs, HERC computes the cost of an average day of service, using a cost function as described earlier in this paragraph. Costs for a given encounter are the product of the cost of an average day of service and the LOS for the encounter (or the portion of the LOS that falls within the applicable fiscal year).

For long-term care services, again the cost of an average day is computed, and cost for a given patient's stay is the daily cost times LOS, adjusted for case-mix by using Resource Utilization Group (RUGS) scores.

For non-medical-surgical acute care, HERC's cost file for a given fiscal year includes only costs for days in the fiscal year, even if the specific encounter either began or ended outside the fiscal year. The unit is a VA bedsection stay.

For medical-surgical acute care, the HERC file for a given fiscal year contains only records for stays that are discharged during that year. The cost figures are for the entire medical-surgical acute stay, even if it began in an earlier fiscal year.<sup>1</sup> For example, the FY1999 file includes some stays that have costs for days in FY98. To make its cost data as nearly comparable as possible with private sector inpatient cost data, HERC constructed acute medical-surgical stays by combining consecutive bedsection segments. Each bedsection segment is assigned a DRG. The DRG that HERC selected to apply for the constructed stay is essentially the highest-priced DRG among those in the included bedsection segments. If a series of medical-surgical bedsections is

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<sup>1</sup> For practical reasons, HERC did not include stays that began before 10/1/1997, the beginning of FY98. Only a very few stays beginning before 10/1/1997 will apply to one of the 86,304 patients we identified as the primary study group. Initiators on Olanzapine or Risperidone for this study have virtually no such stays. Therefore, inpatient cost data is essentially, if not absolutely, complete.

interrupted by one or more non-medical-surgical bedsections, HERC constructs as many medical-surgical stay records as there are sets of consecutive medical-surgical bedsections. For example, suppose a stay produces the following sequence of bedsections: cardiac care, surgical intensive care, cardiac care, rehabilitation (non-medical-surgical), respiratory care, nursing home (non-medical-surgical). HERC would construct two separate medical-surgical stay records (cardiac-surgical ICU-cardiac, and respiratory) and two non-medical-surgical stay records (rehabilitation and nursing home), even though all of these bedsections were part of the same stay (considered from VA's point of view).

HERC's treatment of medical-surgical acute care poses two problems for this analysis. First, for stays that overlap two fiscal years, we have to assign costs to each of the fiscal years. We did that by simply assigning to each fiscal year the same fraction of HERC's total cost as the days in that fiscal year accounted for out of the total length of the stay.

Second, for patients who were still in the hospital in a medical-surgical stay (as defined by HERC) at the end of FY2002, HERC has no record in the FY2002 data.<sup>2</sup> For these cases, we followed HERC's procedure as far as we could to assign a cost to those stays. Using the HERC rules and regarding the bedsection segment the patient was in at the end of FY2002 as though it were the discharge segment for the stay, we constructed acute medical-surgical stay records from the inpatient data maintained at AAC. Among the component bedsection stays, we selected the highest-priced DRG (daily rate) as applying to the full stay. The total cost of the stay was the number of days times the daily rate for the applicable DRG. If the constructed stay overlapped two fiscal years, we applied the proportionality rule described earlier in this paragraph. We determined daily rates for each DRG by averaging the daily rates for that DRG from all of the applicable FY2000 acute medical-surgical stays for the study group (86,304 patients) in the HERC data. In computing this average, each stay was weighted equally regardless of its length.<sup>3</sup> The daily rate in each stay was HERC's national total cost divided by the length of stay.

For outpatient care, budget amounts are computed for each OP procedure (as identified by CPT codes [HCPCS]) that is recorded in the AAC OP patient care files. For CPT codes that are covered by Medicare, HERC uses the standard Medicare payment (before any local adjustments). For procedures not covered by Medicare, HERC estimates a per-service payment. Payments include both a provider payment and, where applicable for that CPT code, a facility payment. These payments, reconciled to CDR totals, become HERC's cost figures.

Estimates of Average Costs in VA Data. Average VA costs for the group of VA MST patients in FY2000 are shown in Tables 4 and 5.

Table 4. Mean VA OP Costs, FY1998-FY2002, for VA MST Patients in FY2000

Fiscal Year	Mean Costs (\$)			
	MST	Mental Health	Other	Total
98	410	1115	1549	2664
99	547	1457	1793	3250
00	773	1926	2093	4019
01	683	1692	1910	3602
02	495	1363	1836	3199

<sup>2</sup> FY2001 data are not yet available (as of March, 2002).

<sup>3</sup> We could not apply HERC's estimated cost function because we would not know what scaling factors HERC applied to the predicted values to make the totals reconcile with VA total costs from the CDR.

Table 5. Mean VA IP Costs, FY1998-FY2002, for VA MST Patients in FY2000

Fiscal Year	Mean Costs (\$)		
	Mental Health	Other	Total
98	1183	775	1958
99	1412	855	2267
00	1787	968	2755
01	1417	994	2411
02	n.a.	n.a.	n.a.

HERC cost data for inpatient costs for FY2002 were not available in time for this study. For projections, the FY02 levels were estimated by averaging the rates of change as were experienced in OP care from FY2000 to FY2001 and from FY2001 to FY2002. Steps are shown in Table 6.

Data in preceding tables have not separated costs for men and women, because in early stages of the analysis, that differentiation was not maintained. When it later became apparent that there were very different rates of incidence and rates of seeking treatment by gender, then separate cost calculations were made for men and women. Table 6a. shows the basic difference in estimated VA costs for men and women.

Table 6. Estimating FY2002 VA IP Costs for VA MST Patients in FY2000

Estimated 5 year cost for FY00 MST patients

	Total Cost	MH Cost	OP Total	OP MH
FY98	35,857,476	17,827,884	20,667,312	8,650,170
FY99	42,800,886	22,257,702	25,213,500	11,303,406
FY00	52,552,692	28,805,454	31,179,402	14,941,908
FY01	46,648,854	24,119,622	27,944,316	13,126,536
FY02	no IP cost		24,817,842	10,574,154

Ratio to FY00 cost

Total	MH	OP Total	OP MH
0.6823	0.6189	0.6629	0.5789
0.8144	0.7727	0.8087	0.7565
1.0000	1.0000	1.0000	1.0000
0.8877	0.8373	0.8962	0.8785
		0.7960	0.7077

factor = 0.892180279 0.84203



Table 6a. VA Average Costs, By Gender, in FY2000 for VA MST Patients in FY2000.

Category	Women	Men
OP All	3852	6019
OP Mental Health	1803	3403
IP All	2517	5586
IP Mental Health	1609	3906
Total	6369	11605
Total Mental Health	3412	7309

Inflation CY2000-CY2003. VA average costs were determined for utilization in FY2000. Only as a final step in translating the average costs into projections of total costs were these estimates adjusted to FY2003 price levels. CPI increases for all items for medical care were 4.7%, 5.0% and 3.3% in CY2001, CY2002, and CY2003, respectively. The cumulative change is 13.6%. Figures taken from [www.bls.gov/news.release/cpi.nr0.htm](http://www.bls.gov/news.release/cpi.nr0.htm)

Other Restrictions on Cost Estimates. Costs were not estimated separately by guard/reserve component of the person expected to apply for treatment. Regression analyses suggest that there is no statistically significant difference by component in the current level of medical care that survey respondents receive, once age, gender, severity of MST and other factors are taken into account.

The estimates assume that guard/reserve personnel would split their medical care between VA and non-VA providers in the same way that current VA MST patients split their care between those sources. If former guard/reserve personnel decide to rely more heavily on VA, actual costs would be higher than those figures. (Our best guess, based on those patients treated for MST who are also respondents to the Large Health Survey of Veteran Enrollees [Perlin, Kazis, et al, 2000], is that these patients already receive most of their care from VA, so that there should not be too much scope for upward variation from the estimates we present.)

Average Costs for Victims of Sexual Assault. The average costs for those with more severe MST are obtained by assuming that all current VA MST patients have the same incidence of more severe MST as do those people in the survey who have some MST and will seek treatment. (We do this because we cannot reliably identify VA patients who experienced rape or sexual assault.) For example, average cost for a rape patient is taken by averaging cost only for the most costly 38% (women's rate) of VA FY2000 MST patients. This approach may overstate the average cost for patients who experience sexual assault, because VA MST patients, as a group, have probably had more severe trauma than the respondents in the survey.

#### ESTIMATED AVERAGE COSTS OF TREATMENT FROM NON-VA SOURCES

The estimates of cost for treatment from non-VA sources rely on the following assumptions:

1) Utilization will be the same as for the estimates of treatment from VA sources. That is, the same number of patients, the same frequency of inpatient use (as identified by DRGs), and the same frequency of outpatient use (as identified by CPT codes) are assumed.

2) Inpatient cost is estimated from Medicare fee schedules for FY2003. Specifically, the DRG weights used are those provided by CMS in the relative weight file posted on its website. Conversion factors (labor and non-labor) are taken from the Federal Register, (Vol. 68, No. 148), Friday, August 1, 2003. Because we cannot estimate the geographical distribution of demand for services, the estimates of cost use the conversion factors for large urban areas. Factors for other areas are about 8% lower.

3) Costs for outpatient services are taken from VA tables of reasonable charges that are used to establish amounts that VA would charge for treatment for conditions that are not service-connected and are provided to VA patients who can pay for care. As with inpatient care, the amounts selected are the national base amounts; no geographic adjustments have been applied. To estimate costs of care for this project, we discount these reasonable charges by alternative ratios that are described below. Essentially, the ratio estimates the relationship between VA reasonable charges and Medicare physician fee schedule rates for those CPT codes that have both a VA reasonable charge and a Medicare allowed charge specified.

Additional adjustments for inpatient care. For inpatient care, Medicare assigned zero weights to DRGs 434, 435, 436, and 437, which occur frequently among VA patients treated for MST in FY2000. These DRGs show services for alcohol or drug-related detoxification, with or without rehabilitation. The frequency with which they occurred in FY2000 among VA patients treated for MST is shown in the table. These services were valued at the VA estimated prices, derived as described in the following paragraph. The estimated VA prices and the implied contribution to total amounts estimated for non-VA care are shown in Table 7.

Table 7. Adjustments for DRGs 434-437

DRG	Occurrences among VA MST patients in FY2000	Est price – VA (\$)	Estimated adjustment to inpatient total for FY2000 (\$)
434	42	5147	216174
435	116	2302	267032
436	77	18738	1442826
437	15	8914	133710

Adjustments to both mental-health and  
total inpatient cost of VA MST patients  
in FY2000.

[2059742](#)

For DRGs 434 and 435, we took estimates directly from HERC data for VA care. But DRGs 436 and 437 show up only in non-medical/surgical care, and HERC does not directly calculate a VA cost of care by DRG for non-medical/surgical care. However, HERC does calculate VA costs for this care by bedsection. Most of the time that DRGs 436 and 437 were recorded in all VA inpatient care (not just for MST patients) in FY2000, the care was provided in bedsections 27, 74, 92, and 93. We could calculate average HERC cost assigned to stays in those bedsections. We could also calculate length of stay in FY2000 for those bedsections and for bedsections with DRGs 436 or 437. These average costs had a high variance. The coefficient of variation was in the neighborhood of

1.0, indicating that for each of these bedsections the standard deviation was approximately the same value as the mean. To account for a substantial part of this case-to-case variance and to make the average cost more directly applicable to MST patients, for each of these bedsections we calculated a cost per day of stay and multiplied that per day cost by the average LOS for DRGs 436 and 437 in the MST data. Separately for each DRG, we then weighted these bedsection averages by the percentage of DRG 436 or 437 stays that were accounted for by that bedsection. The result is shown in Table 2 as the Est. price – VA. We then multiplied that weighted average cost for each DRG by the number of stays with that DRG in the MST data for FY2000. The adjustment is a substantial fraction of total inpatient cost, as it amounts to \$358 per MST patient in FY2000. That amount is equivalent to more than one-quarter of total inpatient care for these patients and over half of inpatient care that is related to mental health.

We could also have estimated cost using VA reasonable charges for these DRGs. In general, using a straightforward approach to estimate the average reasonable charge, the estimates would have been considerably higher than the amounts shown above in Table 7. VA reasonable charges for inpatient care are specified as a daily rate for ancillary and room and board charges. For DRGs 434 and 435, the daily rates were between \$1,000 and \$1,500. For DRGs 436 and 437 the daily rates were between \$700 and \$900. The mean length of stay for the episodes with these DRGs among patients treated for MST was well over 20 days. However, the median LOS for all VA stays in each of DRGs 436 and 437 was 10 days. Taking the median stay for all VA patients, not just MST patients, as the reference point would have reduced the allowed charge for DRG 436 to an amount just over \$8,000, and would have reduced the total adjustment for these four DRGs by about one-third, or an average of about \$120 per patient across all VA MST patients.

The DRG weights in the MCS table of relative weights reflect only the basic charge for services. Additional amounts are paid by Medicare for factors such as capital cost adjustments, outlier payments, disproportionate share payments, indirect medical education payments. These additional payments will vary both geographically and by the individual hospital. As noted, we cannot project the geographical incidence of demand for care under new legislation. However, we can make an approximate adjustment to the inpatient dollar cost estimates to reflect these additional payments beyond the Medicare basic payment.

In a project that estimated the amounts that VA would have to pay to purchase services from outside providers, calculations of these additional amounts beyond the basic payment were made for six VA hospitals. (Nugent, et. al. 19??) We have assumed that this additional mark-up beyond the basic payment would be the same, on average, for all additional inpatient treatment made available under any new legislation. Given the distribution of DRGs provided to VA MST patients in FY1998 through FY2002, we have estimated that the average mark-up for all inpatient care would be 10 percent of the basic amount; for mental health care, 8.5 percent of the basic amount. These amounts were determined by inspection from the entries in Table 3. The ratio for inpatient care varies quite a bit from year to year, and so we thought we should select a value nearer the maximum amount shown, as that seems more typical for FY2001 and FY2002. Entries for mental health care show greater stability, except for FY2002, which looks to us like an outlier. Specific year-by-year ratios are given in Table 8.

Table 8. Ratios of Total to Basic Medicare Allowance for Inpatient Care  
Averages of Amounts Specified in Nugent, et. al., for each DRG, weighted for mix of DRGs in VA care for MST patients in FY2000

Fiscal year	All Inpatient Care	Mental Health Care Only
1998	1.08543	1.07639
1999	1.09135	1.08713
2000	1.08482	1.08575
2001	1.09673	1.08357
2002	1.10923	1.11791

With these adjustments for DRGs 434-437 and the adjustment to convert from basic amounts paid to total amounts paid, we derived the following estimates. For all inpatient care, the estimated total cost under Medicare methods for inpatient care delivered in FY2000 to VA MST patients would be \$10.2 million. The average cost per patient (including those with no inpatient care) would be \$1,767. The total cost for inpatient mental health care would be \$5.7 million. The average cost per patient would be \$996.

Additional adjustments for outpatient care. Of 10,707 CPT codes listed in the October 2003 revision of the National Physician Fee Schedule relative values, 6,620 had positive values for either a facility or non-facility weight. Of all the FY2000 occurrences of CPT codes recorded in the VA outpatient data for patients who received MST treatment from VA in FY2000, 98.4% of the 378,245 occurrences were for CPT codes that were included in the National Physician Fee Schedule. However, only 62.1% of the instances were for CPT codes that had a positive value for either facility or non-facility weight. For outpatient treatment for mental health, the rates of match are higher: 99.6% with an entry in the fee schedule, 80.9% with an entry with positive weights. (Table 9)

Because 36.3% of all occurrences of CPT codes and 18.7% of occurrences for mental health care were not priced in the Medicare fee schedule, we used another source to estimate costs for purchasing any outpatient services from non-VA providers. As noted above, we used the schedule of reasonable charges that VA establishes to determine how much to charge patients who can pay for their care for treatment of non-service-connected conditions. We selected version 1.2 of the reasonable charges, as those were in effect around FY2000.

VA reasonable charges are typically higher than Medicare charges for the same service. To maintain our focus of estimating costs for purchasing services outside VA at approximately the same rates as Medicare pays, we estimated the scale on which Medicare and VA charges differ. For the CPT codes that were in common in the two systems, and for which the National Physician Fee Schedule had positive weights, we determined both what the VA reasonable charges would have been for all outpatient care for patients treated for MST in FY2000 and what the corresponding Medicare allowed charges would have been. The reasonable charges were about \$35.4 million, while the Medicare facility or non-facility charges were, respectively, about \$14.7 million or \$16.6 million. The Medicare charges were, on average, either 42% or 47% of the VA reasonable charges. For services provided for mental health care, the ratios were higher: 55% or 60%, indicating that for those services the Medicare rates were closer to VA reasonable charges than for all outpatient services. (Table 9)

These results give us two ways to estimate the costs of purchasing outpatient services from non-VA providers. First, we can estimate the reasonable charges for all services, then apply a scale factor to

adjust the reasonable charge amounts to a value that would be closer to Medicare allowed charges. That approach would give an estimate of the total charge for all OP services in FY2000 for VA patients who were treated for MST that would scale the \$47.5 million figure shown in Table 2 back to \$20.0 million (42%) or \$22.3 million (47%). The estimates for mental health outpatient care would scale back the actual \$21.5 million to \$11.8 million (55%) or \$12.9 million (60%).

Second, we could apply Medicare fee estimates for those CPT codes for which we have them, and substitute a scaled VA reasonable charge amount for CPT codes for which we do not have a Medicare weight. For all outpatient care, the VA reasonable charges for CPT codes for which we do not have a Medicare weight are given by the difference between \$47.5 million and \$35.4 million, or \$12.1 million. For mental health care only, the amount is the difference between \$21.4 million and \$14.0 million, or \$7.4 million. Scaling the differences for all care would give amounts of \$5.1 million or \$5.7 million. These amounts would be added to the computed allowed charge amounts of \$14.7 million (facility charges) or \$16.6 million (non-facility charges) to give \$19.8 million or \$22.3 million, respectively. For mental health care, the amounts would be \$4.1 million or \$4.4 million. These would be added to \$7.8 million or \$8.4 million to give totals for mental health care of \$11.9 million or \$13.2 million.

As is evident, these two approaches give almost exactly the same total amounts. For all care, the contrast is between \$20.0 and \$19.8 million for facility charges; \$22.3 million by either method for non-facility charges. For mental health care, the amounts are \$11.8 versus \$11.9 million for facility charges, \$12.9 versus \$13.2 million for non-facility charges.

With either method of valuing services for which a reasonable charge amount could be determined, one must still account for those CPT codes for which no reasonable charge amount was listed in version 1.2 charges. Our approach was a very simple one. We knew that for all care, we could determine reasonable charges for 91.63% of occurrences of CPT codes; for codes for mental health services, the rate was 97.77%. To estimate charges for all codes, we assumed that the average cost per occurrence was the same for codes that we could not price as for codes that we could price. For the total cost amount, we would multiply by 100.0/91.63; for mental health care only, we would multiply by 100.0/97.77.

Applying these adjustments to the estimates of total outpatient cost of care derived using the first approach above gives amounts of \$21.8 million (facility) or \$24.3 million (non-facility). For mental health care, the corresponding estimates are \$12.1 million and \$13.2 million.

The amounts cited in the previous paragraph are estimates of what the care given to VA patients who were treated for MST in FY2000 would have cost if the care were purchased from non-VA sources at rates approaching Medicare allowed charges. These amounts are not estimates of the cost of providing care to a new set of patients who would become eligible for treatment under proposed legislation. To determine the estimated cost of care for those patients, one must first calculate the average per patient cost that is implied by the totals presented in the preceding paragraph (and Table 2). Then that average cost can be scaled by an estimate of the number of patients who will seek care given the new eligibility provisions. In addition, one might choose to further adjust that estimated amount, if one expects that the average cost for all VA patients currently receiving VA treatment for MST may not apply exactly to the new patients who will seek treatment. We return later to that issue of a possible additional adjustment. For now, we deal just with estimates of the cost of care, using the average VA cost as the appropriate average amount to estimate costs for patients who seek care under any new legislation.

In FY2000, there were 5,747 patients who received some treatment for MST. This number is determined by taking all patients who had treatment coded under VA clinic stop codes 524 (active duty sexual trauma), 525(women's stress), or 589 (non-active duty sexual trauma). We also included all women who received individual or group outpatient treatment for PTSD (clinic stops 516, 519, 540, 542, 561, 562, 580 and 581).

Calculating average costs for those patients gives results in Table 10.

Table 9. Determining Adjustment Factors for Outpatient Average Costs  
Based on Priced and non-Priced CPT Codes under Medicare

	All Care	Mental Health Care	
Total occurrences of CPT codes, FY2000	378,245	157,043	
Occurrences with reasonable charges:	346,604	153,537	
Rate of match	.9163	.9777	
Occurrences not matched to reasonable charges	31,641	3,506	
Occurrences matched to Medicare fee schedule	372,203	156,427	
Rate of match	.9840	.9961	
Occurrences matched to Medicare fee schedule with positive Medicare price	234,997	126,996	
Rate of match	.6213	.8087	
Occurrences with both reasonable charges and Medicare fee schedule	345,847	153,310	
Charge amounts for matched occurrences with positive Medicare weights			
Reasonable charges	35,361,094	13,972,693	
Medicare – facility	14,703,747	7,753,554	
Medicare – non-facility	16,564,499	8,437,471	
Ratio – Medicare charges as percent of reasonable charges:			
Medicare – facility	.4158	.5549	
Medicare – non-facility	.4684	.6039	
Reasonable charges – all CPT codes with reasonable charges	47,545,822	21,484,689	
Ratio – Reasonable charges for occurrences with Medicare charges, as percent of reasonable charges for all occurrences with reasonable charges	$\frac{35,361,094}{47,545,822} = .7437$	$\frac{13,972,693}{21,484,689} = .6504$	

Table 10. OP average costs per patient receiving VA MST OP treatment in FY2000

	Mental Health	Other	Total	
Reasonable charges, adjusted for non-priced CPT codes	3,822	5,143	8,965	
Reasonable charges, further adjusted to Medicare – Facility charge	2,121	1,607	3,728	
Reasonable charges, further adjusted to Medicare – Non-facility charge	2,308	1,892	4,200	

Table 11 shows 3 estimates of costs for purchasing services from non-VA providers. The first set of estimates evaluates OP costs at 80% of VA reasonable charges. The other two estimates evaluate OP costs at the deflated rates for either facility-based or non-facility-based charges. The latter two estimates are probably not fully realistic, as they assume that VA can purchase these services at rates that are equivalent to Medicare rates. The first estimate is likely to be closer to the amount VA would have to pay to purchase the services on a contract basis from non-VA providers. As is clear from the table, the differences in estimated costs from these approaches is very different, depending on whether one wants to assume that VA can make the purchases at low rates.



Table 11. Estimated Per Patient Total For Purchasing Services From Providers Outside VA

	Mental Health	Other	Total
Outpatient – 80% of reasonable charges	3,058	4,114	7,172
Inpatient	996	771	1,767
Total Estimate	4,054	4,885	8,939
Outpatient – facility charge	2,121	1,607	3,728
Inpatient	996	771	1,767
Total Estimate	3,117	2,378	5,495
Outpatient – non-facility charge	2,308	1,892	4,200
Inpatient	996	771	1,767
Total Estimate	3,304	2,663	5,967

In generating projections of estimated costs of any benefit that Congress may enact, we assume that costs for men and women are in same proportion in non-VA costs as in VA costs. On close examination, we find that this is generally true for outpatient costs. In VA, for MST patients, men's costs for all outpatient care averaged 56% higher than women's costs. For mental healthcare for these same patients, men's costs were 89% higher than women's costs. When costs from non-VA sources were evaluated for these same patients, total outpatient costs were 64% higher for men, mental healthcare outpatient costs were 97% higher for men. The non-VA cost ratios between genders were very similar to those for VA. For inpatient costs, the ratios are much different than for outpatient care. In VA data for MST patients, men's inpatient average costs were 122% higher than women's; non-VA costs for men were only 41% higher than for women.

Adjusting the inpatient costs for male/female differences is much more complex than it was for outpatient data. Several adjustments discussed above would have to be applied. Instead, because outpatient care accounted for about  $\frac{3}{4}$  of the non-VA cost of care, we applied the same ratios as were present in VA data to calculate costs for men and women for all care and for mental healthcare in non-VA data.

